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Force versus food: A short history of agriculture in the Soviet sphere

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Introduction

The division of the world into "developed" and "under-developed" areas is a commonplace of post-war political journalism. The result has been that the intelligent reader of the daily press—in Paris, Karachi, Djakarta, or Washington—has little choice but to equate economic development with the much narrower concept of technological achievement. Factories and mines, railway and telegraph networks, mechanized agriculture—all these are taken as the standards of a "developed" economy. Conversely, the term "under-developed" suggests the peasant household, rudimentary communications, depressed per capita income, and unsatisfactory public hygiene—all of which contribute to a "low" standard of living.

These notions, sweeping and arbitrary though they are, have gained wide acceptance. They have helped to shape the emotional and intellectual climate in which modern statesmen, journalists, educators, and the great mass of humanity all work and live.

But frequently the result of such schematic thinking on the problems of the world's economies have been unfortunate and productive of misunderstanding. In the West, these concepts have sometimes led to a complacency which might easily be, and in fact has been, interpreted elsewhere as an unfeeling arrogance. In some regions of Asia and Africa, on the other hand, an honestly derived sense of deprivation and poverty has been converted into an uncritical hostility toward the highly industrialized West and used to further zenopho-

bic tendencies and extremist movements which grasp at unrealistic and "patent" solutions to the all too real problems of so-called under-developed economies. Finally, the experience of the past decade suggests that the concept of economic development has been employed as a political and ideological weapon by a number of Communist countries, in an effort to advertize the advantages of their own planned economies and in a parallel attempt to foster diplomatic and commercial alignments.

From all this it is fair to conclude that the concept of economic development needs more precise definition if it is to be employed intelligently. And the very first thing that needs saying is that the economic development of a country involves a great deal more than the relatively obvious presence of heavy industry and mechanical equipment. In the final analysis, it is not the availability of industrial equipment alone which determines the degree of economic development or the standard of living, but rather how a people lives. In other words, one must first ask whether a nation suffers want, if so of what kind, and to what manner of use its available resources are put.

To realize this point, one need only note that several Asian and African countries are considered under-developed not *only* because they suffer from a shortage of industrial equipment but also because they are victims of malnutrition and recurrent famine. It is certainly true that such countries need industrialization: that they require railways and motor transport, cement factories, and electric generating stations. But it is equally important to inquire into the diverse purposes which these products of modern technology are intended to serve. It is certainly undeniable that any country, particularly one which is primarily agrarian, will take pride in the construction of an important rail or road network, or in the erection of a plant capable of producing machine tools.

Yet, for an economist, a complex machine is not of *itself* an index of economic development. The use to which the machine is put is crucial. If a diesel locomotive is employed only to transport munitions, to move bodies of troops, or to fetch the raw materials necessary

for the construction of yet more locomotives, it is doubtful that it contributes significantly to economic development. But if its use is so diversified as to include the carrying of produce to market and finished products to agrarian centers, if the raw materials which are necessary for its construction have not been obtained at the expense of plows and irrigation equipment, if the real income of the community which it serves is sufficient to make travel and the exchange of goods both possible and advantageous, then this particular machine does contribute to economic growth and well-being.

All this means that "industrialization" cannot be viewed as an end in itself if the real goal is the genuine economic development of a country or territory. Economic development is not necessarily synonymous with industrialization; it really refers to the balanced growth of a nation's economy, and hence to the sensible use of its available resources.

The present study may perhaps serve to illustrate this point in some detail. In examining the development of Communist agricultural institutions over a period of four decades, it raises some questions and suggests a number of lessons which, if not entirely new or original, may still be useful and interesting to the general reader, irrespective of his national allegiance or place of residence.

No one, of course, can seriously doubt that the Soviet Union, and at least some of its East European dependencies, have attained a degree of industrialization which enables them to produce capital goods and a variety of scientific and mechanical equipment in substantial quantities. Similarly, most informed observers would acknowledge that some Communist countries—and the Soviet Union in particular—have shown themselves capable of offering the products of their domestic industry in the international market. And certainly they have succeeded in building, and maintaining, one of the largest and most formidable military arsenals in existence.

The relative speed of these achievements has attracted considerable attention and comment, even among those observers who are aware of the staggering human and political price which the Communists

have had to pay. In recent years especially, a tendency has developed among some non-European commentators to display a marked degree of interest in the adaptability of Soviet solutions to the problems of their own economies.

On the whole, the sources of this interest are comprehensible. Essentially they derive from an urgent desire to "catch up," and from a deeply felt need for self-assertion, as well as from a rather less tenable tendency to equate independence with self-sufficiency. But when this much is said, it can still be argued with cause that such interest arises from a misunderstanding which, in the final analysis, derives from the attempt to equate industrialization for its own sake with sound national economic development.

Such an equation simply cannot be sustained in practice. If the goal of organized national economic activity is to advance the welfare of the people, then it follows that the chief problem in any modern community is to aid those elements in the population with the smallest real income. And in all but perhaps a half-dozen countries of the world that means devoting primary attention to the peasant—whether he is engaged in the production of rice, wheat, millet, or maize. There is no inference that this process can be accomplished without industrialization. Quite obviously it cannot. In some countries of East and South-East Asia, for instance, one of the major impediments to sound economic development—which can only be overcome by a systematic program of industrialization —lies in rural overpopulation. Clearly, this is a problem not susceptible of solution merely by fostering an increase in the productivity of agriculture. That might only result in agricultural under-employment, and the real solution would still lie in the transfer of population from the land to a variety of urban and industrial occupations. Similarly, it may be considered axiomatic that one of the fundamental requirements of any "under-developed" economy must be the increase of the national income. And the latter would be almost impossible of accomplishment without some measure of industrialization and without the resultant accumulations of net profit to the

community, over and above its total consumption in the form of goods and services.

Yet, the fact that industrialization *per se* is not and can never be the simple panacea which some have tended to make it remains true. For the under-developed countries, the road to sound economic development still lies in a consciously planned attempt to harmonize and coordinate agrarian and industrial growth.

It is a matter of record that in some parts of the world the goal of industrialization was less transformation of the economic and social level of the masses than the desire to achieve military superiority over one's neighbors, or else to attain an absolute degree of economic self-sufficiency, because this seemed desirable from a political standpoint and feasible in terms of the availability of basic raw materials. Indeed, industrialization has been undertaken by a number of Communist states for a combination of both reasons, as well as in an attempt to realize in practice the substance of an arbitrary and dogmatic ideology.

To the highly interdependent contemporary world which has now entered the era of atomic technology and may use this technology in peace or war, these are reasons for industrialization which, while they may be comprehensible, do not seem to be very sound. The recent past shows that, whether in the case of Nazi Germany, Soviet Russia, Imperial Japan, or "People's Democratic Hungary," the price paid by the populations was exorbitant, and the results for the world at large have been far from satisfactory. In effect, each of these motivations for programs of precipitous industrialization has led to war, totalitarianism, and colonialism. That they may have brought certain benefits to some small group is not so significant as the fact that they have never brought as many benefits for the entire population as a balanced concept of economic development, however under-developed a particular economy might be.

To illustrate this point in detail, an economist could present a variety of evidence and case histories in abundance. Yet few of

these histories are as instructive as the forty-year record of the Union of Soviet Socialist Republics and more recently, of its smaller East European satellites. These histories may seem like dazzling achievements only to those who do not know them in detail. While impressive in some respects they are also a chronicle replete with error, cruelty, and, most damaging for our purposes, economic malfunctioning. The vital question before us is only whether and how many of them are really good lessons which are worthwhile learning and repeating.

The pages which follow do not attempt to prejudge this issue. They present a simple discussion of Communist agricultural institutions and practices, and as such they constitute a brief inquiry into the Soviet theory of economic development. Neither here nor elsewhere can a tenable attempt be made to minimize certain aspects of the Soviet industrial achievement. Yet to repeat, it is legitimate to question whether that achievement constitutes a real and useful development of the national economy.

Agriculture in the Communist Economic System

In the four decades following the Revolution of 1917 a unique form of agricultural organization took shape within the Soviet orbit, reflecting Communist theory regarding the land and the uses to which it should be put. The four essential features which characterize this system may be summarized as follows:

1. State, or "public," ownership of all land;
2. Cultivation of the land not by individual families or farmers, but by clusters of many households functioning together in larger units known as "collective" or "state" farms;
3. The existence of a state-owned and state-operated pool of all agricultural machinery, and a centralized system of crop collection effected through a statewide network of machine tractor stations (MTS);
4. The regular and recurrent imposition of delivery quotas for all types of agricultural produce on each of the producing units, at prices determined by the state in its capacity as the principal purchaser.

As might well be expected of all institutions which are in process of growth and development, the Soviet and other Communist agricultural systems in Europe and Asia have not remained wholly static. They have experienced varying degrees of change, occasioned either by ideological considerations or by the necessity to adapt the essentials of the system to prevailing economic, po-

litical, or geographic conditions. Nevertheless, it is fair to say that the four basic features have always been retained in recognizable form as characteristic hallmarks of Communist agricultural organization.

What have been the determining factors which have helped to shape this specific form of organization? One has certainly been Communist policy in general. Another appears to be the stage of economic development reached by a given country at the time of the introduction of a Communist system. Both deserve some further examination.

Informed observers have often noted the curious fact that neither the Soviet Union nor any other Communist state has ever developed a coherent or really consistent approach to the problems of agricultural policy. Instead, agriculture has been regarded as only one among several instruments to be employed in the struggle to attain larger political goals, and as an adjunct to the industrial development schemes of Communist Party planners. In other words, orthodox Communists have always adopted an essentially *ad hoc* attitude toward agricultural problems—so much so that it is almost true to say that they have never been really interested in agricultural policy at all, except as an expression of their program for non-urban populations in general. In short, orthodox Communists have never wanted to, and therefore have never succeeded in, differentiating between the *peasantry* as a sociological and political entity and *agriculture* as a form of economic activity. Hence, from the very beginning, the development of Communist agriculture has been shaped rather more by political than economic considerations and has always been influenced, most decisively, by a deep-rooted distrust of the peasantry which is inherent in traditional Marxist thought.

The peasant, engaged as he traditionally is in individual production, has always been seen through Communist eyes as a backward stage of development when compared with the modern factory worker, whose economic activity is essentially of a cooperative nature. Similarly, the peasant's proverbial attachment to his

land and his innate conservatism have tended to alienate him from the urban-oriented Communist party whose preoccupation with the industrial proletariat has usually led it to regard him with dislike and suspicion. Moreover, the doctrinaire conception of a Communist society is naturally quite incompatible with the continued existence of a sphere of economic activity dominated by private property and private enterprise, and therefore characterized by what the Marxist describes as "pre-capitalist" production relationships.

The combined effect of these antagonisms between Party and peasantry serves to explain not only the Communist attitude toward agriculture, but also the long-term ambition of every Communist regime, which is to transform the peasantry into a rural proletariat, employed and remunerated on the same terms as the urban worker. This program has not been, and was not intended to be, realized all at once. Yet it remains as much of a basic objective today as it was in the early and turbulent days which followed the Bolshevik revolution. Expropriation of the land, machine tractor stations, collective and state farms are still seen by Communist theoreticians as necessary milestones along the road to the farming city or "agrogorod."

Apart from these socio-political and rather theoretical considerations, Soviet agricultural policy has also been shaped by the rather immediate determination of the Soviet leaders to make reality conform to theory by forcibly transforming the USSR into an industrialized state.

The Bolsheviks had, after all, triumphed in a country which, quite contrary to orthodox Marxist theory, was not highly industrialized and which could not boast of a powerful or numerous urban proletariat. In Leninist terms, therefore, it lacked the major prerequisites for the construction of a socialist state and for the establishment of a dictatorship of the proletariat as conceived in Communist ideology. Moreover, these doctrinal considerations were given added urgency in the eyes of the early Soviet government because of their experiences during the period of civil war and foreign intervention which followed close on the heels of the

October Revolution. The Bolsheviks saw in these events not only their own weakness, but also ample evidence of the hostility felt toward them by the rest of the world. Industrialization therefore seemed imperative to them on both purely practical and on theoretical grounds.

The implications of this decision for Soviet agriculture were momentous and far-reaching. Once made, it committed the Soviet government to a ruthless search for the two essential ingredients of industrialization—capital and manpower. Unable or unwilling to obtain foreign investments or technical aid, the Soviets determined to finance their program of industrial expansion from domestic resources alone. And this in practical terms meant that it would be financed from agriculture, as the only available resource. Similarly, the search for manpower could only be realized in conjunction with the establishment of agricultural institutions which could guarantee that a substantial portion of the rural population would be forced to migrate from the land into the city and the factory.

The result has been that, for almost four decades, Soviet rural policy—if indeed one can call it a policy—has been directed not only, or even primarily, toward the maintenance or improvement of agricultural production, but toward the achievement of certain social and ideological aims on the one hand and the accumulation of capital for an industrialization program on the other.

If, however, orthodox Communism has been influenced in its attitude toward agriculture by a profound distrust of the peasant, as well as by its overwhelming desire to find security and reassurance through an industrialization program, even in the years following the second World War it has also had to reckon with the degree of economic development reached by a given country at the time of the Communist assumption of power. With the exception of Czechoslovakia and the so-called German Democratic Republic, all members of the Soviet orbit, including the Soviet Union itself, were primarily agricultural. The bulk of their populations were engaged in tilling the land, and by far the largest part of the

national product originated in agriculture. All of the countries in question, of course, had some industrial potential, but as in the case of Czarist Russia, so in that of the People's Democracies of Eastern Europe—their industries tended to lag behind this potential. They could, therefore, be considered economically retarded, at least so far as they displayed one of the classic features of so-called economic "backwardness" in the form of agricultural under-employment.

The presence of more people on the land than necessary to raise the crop which the soil is capable of yielding acted as an added incentive for the Soviet and the later satellite industrialization drives. It appeared to provide an economically justifiable reason for instigating a transfer of population which, in turn, had the added advantage of helping to solve the ideologically significant "peasant problem."

In the light of this discussion, it should now be clear that agriculture, as a national industry vital to any country—whether large or small—has suffered systematic neglect in all parts of the Communist world over a period of four decades. First within the Soviet Union, and presently in the other states of the Communist orbit, agriculture was relegated to a secondary role for a combination of ideological, political, and economic reasons. The result has been the development of more than a half-dozen national economies remarkable for their imbalance and distinguished by their recurrent need for emergency drives designed to bolster an inadequate and unstable agricultural output. Even though their industrialization drives have achieved a relative measure of success, the Soviet and other Communist governments have failed to institute a really basic improvement in their agricultural structure. Although perhaps in a somewhat modified sense, it still remains true that Communist policy is less interested in helping to secure a permanent improvement in agricultural production than it is in achieving certain other aims to which purely agricultural considerations must remain subordinate. A brief account of the evolution of agricultural institutions in the Soviet Union will help to illustrate this point.

The Development of Soviet Agricultural Institutions

The development of Soviet agricultural institutions over a period of forty years can be divided into several fairly distinct periods, each with certain characteristic features.

The first of these phases is that of "War Communism," or the period covering the civil war and its immediate aftermath, from late 1917 to early 1921. Essentially this was a time of complete economic chaos, in industry as well as agriculture.

The Bolsheviks, drawing their principal support from the urban proletariat, had relatively few followers among the peasants. While they had been among the few political groups to give their emphatic blessing to the expropriation of landed estates without compensation by the peasants since the spring of 1917, their equivocal position on private land ownership and distribution had failed to gain them much influence in the countryside. The party which did have by far the largest following in the rural areas was that of the left-wing Social Revolutionaries. Consequently, in order to gain the support of the peasants, the Bolsheviks in their Land Decree of November 1917 in effect adopted the policy platform of the Social Revolutionaries, expropriating the large estates and distributing the land to "those who tilled it."

For reasons which have already been noted, the Bolsheviks did not, however, intend to organize agriculture along the lines advocated by the Social Revolutionaries, as promised by their own propagandists. The Land Decree of February 1918, although restating the general lines of the November decree, already mentioned

the desirability of promoting a "collective economy in agriculture . . . with a view to a later transition to socialistic agriculture."

At the time this meant little in practice. The land hunger of the Russian peasants was so great that they divided the large estates once held by the aristocracy and the monasteries with little regard for the specific wording of any decree. The division of land proceeded spontaneously, and would no doubt have taken place whether the Bolsheviks—or any other government—had approved it or not. Even though these estates may have been viewed as the only practical or even possible nuclei for the formation of collective or state farms, the whole question of the socialization of the countryside had nevertheless to remain academic during these early stages. In 1917 and early 1918 political considerations in any event dictated quite another course. Above all else the Bolsheviks needed to win the support of the peasantry and to find a means of raising the output of food. The job of changing the social structure of the countryside would have to wait.

This initial caution in the Soviet dealings with the peasantry was, of course, only a counsel of expediency—not a matter of conviction. Having seized power for the first time the Bolsheviks found themselves in a precarious situation. They did not control large sections of the country, and they faced political disorder in those which they did control. Industrial production had come to a virtual standstill, currency inflation had reached runaway proportions, and the peasants had no incentive to bring their surpluses to market. The Ukraine, at that time the "breadbasket" of all Russia, was to remain a confused battlefield for years, and this, of course, made the problem of feeding the urban proletariat and the rapidly growing Red Army ever more acute. Under such circumstances initial caution soon gave way to what seemed to be the only possible solution—coercion. By recruiting and dispatching small groups of so-called committees of "poor peasants" from the countryside and organizing well-armed "food detachments of workers and poor peasants" from the cities, the Communist government in effect began to requisition all surplus produce from the

peasantry and, driven by almost desperate need, usually exacted a great deal more than actual "surplus." Perhaps the best summary of this program was given by Lenin himself:

> The peculiarity of War Communism consisted in the fact that we really took from the peasants all their surpluses, and sometimes even what was not surplus but part of what was necessary to feed the peasant, took it to cover the costs of the army and to maintain the workers. We took it for the most part on credit, for paper money. . . .*

The consequences of such a policy could well be anticipated. Not only did the peasants attempt to hide their surpluses (which was often difficult because of the existence of the "committees of poor peasants"), but they also began to curtail their output. Accordingly, in the short period of two years—which were characterized not only by civil war, general economic chaos, and the peasant resistance which became a widespread response to forced requisitions—an almost total collapse of agricultural production ensued. In late 1920 the sown acreage in the Soviet Union had fallen to almost a quarter of the pre-war figure, and food production suffered accordingly.

With the end of military operations against the dissident "White" armies, peasant resistance increased, particularly as the danger of actual fighting ended and as famine began to develop not only in urban but in rural areas as well. Peasant opposition took the form of local uprisings and eventually culminated in the armed insurrection of the sailors of the Red Fleet at Kronstadt. The sailors' demands reflected not only their own wishes but also those of the peasantry, and were the more serious since the Baltic Fleet had been one of the first and best units of the Bolshevik forces. Only then did it become obvious to the Soviet government that the policies of the past three years were unworkable. It was no longer any use attempting to extract, by force or persuasion, farm

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* Lenin, *Sochineniia,* vol. XXVI.

The peasantry owned about half of Russia's farm land in 1914, and seized the rest during the revolutionary upheaval of 1917. The Bolsheviks first encouraged these seizures. Once in power, they nationalized the land and introduced collectivization.

Peasant resistance to confiscations and low prices forced adoption of the relatively liberal NEP in the early 1920's. Farmers like those of Central Asia (above) could take their produce to free markets. But the Kremlin regarded such concessions only as a makeshift. With the first Five Year Plan, building of collective farms (below) again became one of the Soviet's highest ambitions.

surpluses which simply did not exist. The time had come to think of producing first and of requisitioning later.

This period of early War Communism is interesting because it illustrates succinctly Communist thinking about agriculture. It demonstrates that Bolshevik agricultural policy was, from the very beginning, dictated by such considerations as the need to woo the peasantry from the Social Revolutionary Party, by the desire to split, and therefore to weaken, the peasants through the creation of the Committees of Poor Peasants, and by a willingness to engage in the most ruthless exploitation through forced requisitions based on the significant but often erroneous assumption that the peasants had surplus stocks. Only in the very last phase of this period, and then only because of dire necessity, were the Bolsheviks driven to realize that the situation had deteriorated to such an extent that dogma, ideology, and political considerations would have to be sacrificed if there was to be any food at all.

The period of War Communism is also significant because it marked the birth and provided the testing ground of certain Communist techniques which were to become standard features of the system not only in the Soviet Union itself but in the East European satellites. These techniques included the creation of committees of poor peasants, which served as instruments of denunciation and exaction and shattered any political unity among the peasants which could be directed against the Communist regime. They included the imposition of arbitrary quotas, or arbitrarily defined "surpluses," which bore little or no relation to the crops actually harvested. And finally, they involved the use of a military or paramilitary worker's militia, to collect the harvest from a reluctant and frequently hostile peasantry.

The New Economic Policy

The virtual economic collapse which marked the end of the period of War Communism was remedied only by measures which led to the inauguration of a so-called "New Economic Policy." In this period the attempt to impose state control over all economic activity was abandoned and a relatively liberal economic practice adopted in an effort to give all workers, whether rural or industrial, sufficient incentive to produce.

In agriculture this meant the end of forced requisitions and, instead, the introduction of a tax in kind, calculated as a percentage of the crop harvested and adjusted in such a manner as to offer rebates to those peasants who were prepared to expand the cultivated areas of their farms. The New Economic Policy, of course, like most liberalizations, was a gradual process. The introduction of a tax in kind was followed by a number of other measures, such as permission to trade freely in agricultural produce, and finally even the right to use hired labor on privately owned farms. In effect, what this meant was that, for a number of years at least, the Soviet government was prepared to ignore the organization of the agricultural economy and to rely on the operations of the market to stimulate production. As a result the sown area, which had fallen to about 77.7 million hectares in 1922, reached 110.3 million hectares in 1926, which is an increase of 42 per cent in no more than four years. Almost the same growth was shown by the grain area, which rose by 41 per cent during the same

period.* The rate of recovery was in fact rapid enough so that in 1927, or ten years after the Revolution, the sown area had returned almost to the pre-war level. A parallel recovery was registered in livestock population and production. By 1927 the total number of farm animals was larger than it had been in 1916. This aspect of recovery, however, was somewhat uneven. Thus, in 1927 there were some 31.6 million horses in the USSR as compared to 35.8 million in 1916, or about 88 per cent of the pre-war total. On the other hand, cattle herds were 12 per cent higher in 1927 than in 1916, hogs exceeded the 1916 totals by 10 per cent, and sheep and goats by about 15 per cent.**

But the New Economic Policy had never been envisaged as a lasting departure. Lenin and many of his associates considered a policy which favored the peasant in his right to private property and conceded the strength of the profit motive as little short of a betrayal of the Communist ideal.

There were, however, a number of other and less purely ideological factors which contributed to the termination of the New Economic Policy and with it of the era of peace in the countryside. These began to play an increasingly important part in the late 1920's.

First there was the fact that though agricultural production had almost recovered its pre-war levels, the marketing of agricultural products had failed to do so. In the crucial case of grain, for example, sales in 1927 were no more than about 38 per cent of pre-war. Even if allowance is made for the smaller land area of the Soviet Union as compared to Czarist Russia, and due account taken of other statistical variables, such a decline—given the intervening growth in population—was an extremely alarming phenomenon. Other agricultural products did not fare so badly, even though none achieved a sales volume comparable to pre-war years. Thus,

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* *Sotsialisticheskoe Stroitel'stvo,* Moscow, 1936.

** V. P. Nifontov, *Zhivotnovodstvo SSR v tsifrakh,* Moscow, 1932.

1928 marketings of potatoes were 57 per cent of 1913, of sugar beets 90 per cent, of meat 95 per cent, and of milk and milk products 89 per cent.*

The reasons for this decline varied. The Communist party chose to find its own reason in the relative inefficiency of the small farm, and used this as one of the justifications for its later collectivization drive.

There is ample evidence, however, that the low prices paid to the farmers during the years even of the New Economic Policy played an even more important part.** Rising industrial prices and relatively stable agricultural prices reduced peasant incomes, increased on-the-farm consumption, and diverted much of the sown area to crops which could command the highest prices. The result was once again a shortage of grain in the cities, which moreover were growing rapidly in population as a result of the industrialization program.

The fact, however, that agricultural commodities were so significantly underpriced was itself the result of another complex of factors. Thus, the Soviet government, for both ideological and intensely practical reasons, was vitally interested in keeping the price of foodstuffs low for the urban proletariat, and since the general drive to raise capital from internal resources precluded a program of agricultural subsidies, the only alternative was to see to it that wholesale prices of produce remained artificially depressed. Likewise the Communist Party, while it recognized the

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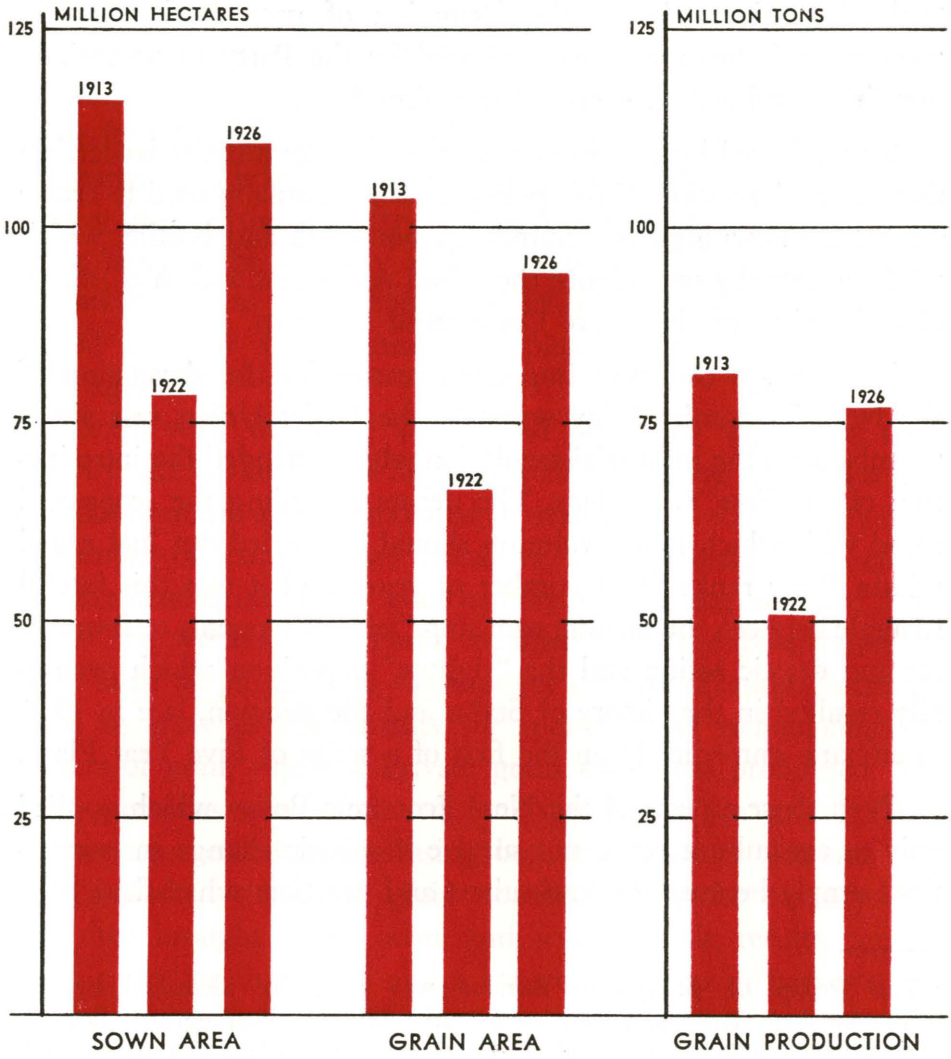
* All data from *Sotsialisticheskoe Stroitelst'vo,* Moscow, 1936.

** In its position as the largest single purchaser on the market the Soviet state played a major role in fixing the price of grain. Although the peasants were permitted to sell their grain on the free domestic market, the government, through its control of milling, storage, and transport facilities, could still make its own bidding price the one at which, in effect, the peasants had to sell. Thus grain prices remained too low throughout the second half of the 1920's, relative not only to industrial products but also to those of other agricultural products. The result was that most peasants did not consider grain as a useful "cash crop."

TABLE I

THE RECOVERY OF SOVIET AGRICULTURE UNDER THE NEW ECONOMIC POLICY



It will be seen that, five years after the introduction of the New Economic Policy in 1921, substantial gains had been made when compared with the catastrophic declines which had resulted from war, revolution, and civil strife. Still, on the eve of the first Five Year Plan (1928), the relatively liberal policy of the N.E.P. had not been in effect sufficiently long to bring grain production back to the levels which had been achieved in 1913.

Source: *Sotsialisticheskoe Stroitel'stvo*, Moscow, 1936

need for higher food production, was nevertheless not inclined, for either political or ideological reasons, to encourage the growth of a strong peasantry. The New Economic Policy on the other hand, by giving latitude to free enterprise in agriculture and retail trade, had given rise to the formation of groups of relatively prosperous farmers who were viewed by the Party as potentially unreliable and even hostile to the regime.*

It was feared by certain elements in the Communist leadership that the prolongation of this policy would eventually tend to create a rural land-owning class, numerous, powerful, and hostile, which might eventually out-balance the urban proletariat and thus jeopardize the aims of the entire Communist program.

But perhaps the most important reason for the abrogation of the New Economic Policy was that the Soviet Union was about to embark on the industrial revolution which attended the introduction of the Five Year Plans. The debate regarding the scope and speed with which that revolution should be carried out had raged within Party ranks for a number of years, and it was this fateful struggle between the uncompromising "left" proponents of immediate and drastic action and the "rightist" opposition which eventually resulted in the victory of Stalin and the decision, late in 1927, to embark immediately on the first of a series of Five Year Plans.

Even those aspects of the New Economic Policy which applied only to agriculture could not survive this basic change in orientation, simply because the institutions and practices which had been

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* This group of prosperous farmers was generally identified by the term "kulaks." The Party and government attempted to equate them in some fashion with the pre-revolutionary landlords, but in fact this comparison was quite unwarranted. Even though there were still class differences in the villages, the land distribution of 1917 had brought about a leveling of holdings throughout the countryside. The "kulaks" of 1928 had had a scant ten years in which—either through luck or enterprise—to accumulate a modest amount of wealth. The attempt to compare them with wealthy pre-revolutionary landlords who had inherited land and fortune through generations was therefore both inaccurate and extreme.

condoned or even encouraged in the agricultural sector under the NEP were not adapted to the task which the Communists now required of that sector, namely, that of financing industrial expansion.

Once again, as in the period of War Communism, agricultural development was to be dictated by considerations not primarily agricultural. The capital necessary to finance industrialization had to be found, and the only available sector of the economy capable of bearing the brunt was agriculture. In the words of one Communist leader, "the peasantry had to be squeezed" if factories were to be built in the quantity and at the pace which the new policy demanded; or, as Lenin had stated in connection with the earlier period of War Communism, "surpluses had to be extracted" once again.

Faced with declining prices and this new threat to their security, the peasants once again reacted by cutting their sales and the Communists again responded by resorting to seizures. By 1928 a number of extraordinary measures were once again in effect. Procurement drives were launched by dispatching so-called "red trains" of workers and Party members into the countryside to seize farm surpluses. The Committees of Poor Peasants were revived to serve as instruments for spotting and denouncing the owners of grain supplies. Private grain trade was prohibited, and harsh penalties were instituted for "speculation" in grain. These measures succeeded in increasing both the absolute amounts and the "marketed share" of grain obtained from the countryside.* But they brought about other and less desirable results, among them a decline in sowing and a consequent drop in harvests. Although in 1929 and 1930 the amount of agricultural produce delivered to the state did increase, it soon became obvious that production would have to rise much more rapidly if it were to provide the wherewithal to finance industrial expansion.

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* The marketed share is that part of the harvest which is not retained in the countryside. As it increases, the absolute amounts delivered will also increase, provided that the harvest either remains constant or increases.

Now that war and civil disorder were matters of the past and the Communist regime had endured for a full decade, both government and Party felt themselves in a much stronger position than in the early days of uncertainty and struggle. The time had apparently come to implement theory in practice, by putting the dictates of dogma to the test for the first time. As an essential concomitant of industrialization, the organization of the agricultural system would need to undergo a total change as well. Private farming would have to come to an end and be supplanted by collectivized agriculture as the dominant form of rural organization and production.

Collectivization

In theories formulated long before the October Revolution, Communist writers had defined the ideal form of socialist agriculture in terms of huge, state-controlled rural factories employing armies of farm workers on terms as nearly similar to factory employment as could be achieved in the countryside.

The expropriation of the large estates and the New Economic Policy had, on the other hand, led to the establishment of numerous small, family-sized farms throughout the Soviet Union. Thus, at the beginning of the era of Five Year Plans, the goal which the Communists envisioned was further away than in the earliest days of the Civil War. But now that the die had been cast in favor of "building socialism in one country"—according to the precepts of Josef Stalin—by seeking to create an industrial bastion, the time had also come to force agricultural institutions into the socialist mold.

From a political point of view, the architects of the Soviet economic development program were motivated by the belief that small-scale private enterprise was wholly incompatible with the concept of a socialist society. As economists and technicians, they were committed to the belief that farming on a large scale was more efficient and therefore more desirable.

Lenin had expressed the political fears of the Bolsheviks when he wrote:

> The small enterprise creates capitalism and the bourgeoisie permanently, daily, hourly, inescapable, and on a mass scale.*

Some years later Josef Stalin, on the eve of the great industrialization drive, stated the Communist dilemma perhaps with even greater clarity:

> "The Soviet power [he said] cannot long be based on two contrasting foundations—on a large-scale socialist industry which eliminates the capitalist elements, and on a small-scale individual peasant economy which creates capitalistic elements."**

As we have noted, these ideological considerations were reinforced by the conviction that large farm units combined with modern mechanical aids would profoundly revolutionize agricultural production. Even though enormously different conditions prevailed in the two countries, the United States was greatly admired for the size of its farms and the extent of their mechanization. This intoxication with sheer size and motive power led to the creation of enormous 100,000 hectare state farms which proved so costly and inefficient that they were eventually condemned as manifestations of "gigantomania" and dissolved. Simultaneously, however, the Communists devoted their energies to the speedy creation of collective farms.

The drive, which began in 1928 and gathered momentum rapidly in 1929, had reached formidable proportions by 1930. From the very beginning, legal proceedings were instituted against "kulaks" who, in theory at least, were rich peasants but in practice proved to be almost anyone who refused to join a cooperative, was disliked by his neighbors, or was considered politically unreliable. The Committees of Poor Peasants were revived, and with them came a return to the use of widespread denunciations as a pretext for confiscation and seizure. A complex system of discriminatory measures was instituted to be enforced both by the army and

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* V. I. Lenin, *Works,* Vol. XXV, p. 173.

** J. V. Stalin, *Problems of Leninism,* Moscow 1934, p. 362.

police. In fact, the cumulative force of this drive was such that, in three short years, more than 50 per cent of the Russian peasantry had been driven into collective farms. This was class war in the fullest sense of the term, directed as it was toward the total "liquidation of the kulak as a class," the confiscation of his property, and the rescinding of his civil rights. The speed and violence with which this drive was carried out could not help but seriously affect output once again. As in the days of War Communism, chaos reigned in the countryside, and even though the Soviet state was infinitely more powerful in 1930 than it had been ten years earlier it was again obliged to call a temporary halt to a program which had gone too far too fast. Stalin was forced to write his famous open letter to the Communist Party entitled "Dizziness from Successes."* In it he "condemned" the excesses of local authorities who had become intoxicated with the apparent success of the collectivization campaign and reminded the zealots that membership in the collective farms must be on a "voluntary" basis.

The reaction was immediate. More than half of those who had "voluntarily" joined the collective farms left them. In the RSFSR, the largest constituent republic in the Soviet Union, the percentage of collectivized households fell from 60 to 23 within two months of the publication of the letter.

But at this point there could be no more turning back. Coercive measures which now included large-scale deportations were soon revived; by mid-1931 about half of all peasant households were once again collectivized, and by 1932 effective peasant resistance was broken.

But the collapse of peasant resistance was not solely due to the application of force and violence. It was as much the result of the great famine which ravaged the Soviet Union during 1932-33 as of Communist terror and class warfare. The famine which made these years so notable was, of course, not brought on by

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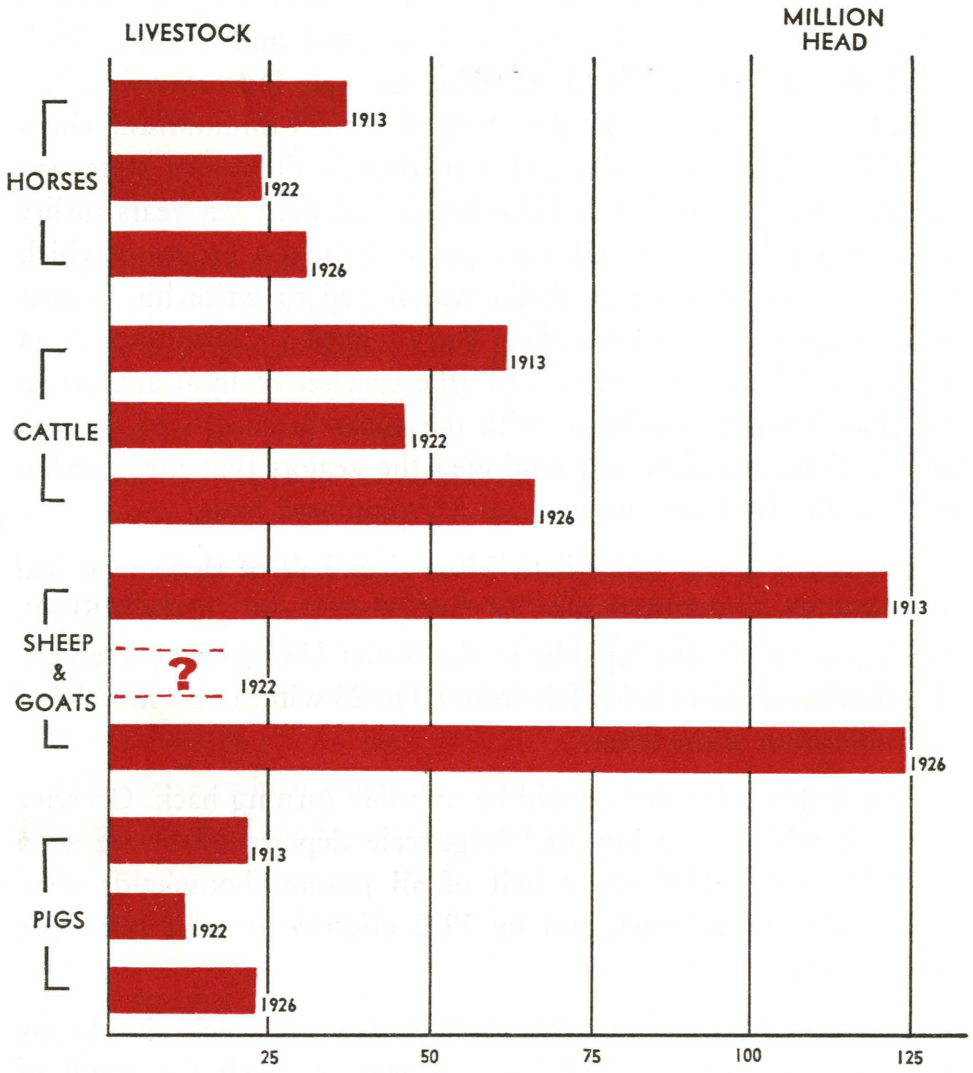
* *Pravda,* Moscow, March 2, 1930.

TABLE II

SOVIET ANIMAL HUSBANDRY UNDER THE NEW ECONOMIC POLICY



The above table illustrates the extent to which the end of civil war and the partial reinstatement of personal incentives under the New Economic Policy contributed to the growth of livestock in the Soviet Union. The destruction which had resulted from the first World War and the internal disorders which followed was more than compensated for by 1926. Only the number of horses remained slightly below the pre-war figure.

Source: V. P. Nifontov, *Zhivotnovodstvo SSSR v tsifrakh*, Moscow, 1932

reduced crop production alone but also by the persistently excessive government requisitions which were a product of the regime's policy of exacting fixed delivery quotas for export and shipment to the urban centers, quite irrespective of the actual size of annual crop production. Had the crops been adequate, there might have been enough to meet the needs not only of the government but of the peasantry as well; since they clearly were not, there was not enough grain left in the producing areas for consumption by the rural population.

Thus the poor harvests of the early 1930's were not the result of adverse weather conditions, but more directly of the collectivization drive itself. Even the dislocations which might have been brought on by an orderly change-over to collectivization would have been significant enough; but as the collectivization drive assumed the proportions of genuine class warfare in the countryside, the results were bound to become disastrous. Crops were not harvested; peasants, who were left with little if any incentive to produce, destroyed what small surpluses they had rather than hand them over to the state; and they slaughtered their livestock in order to feed themselves rather than surrender their animals to the "collectivized" farms. The consequence of this policy was general famine on a massive scale.

The Soviet government has never published adequate or accurate data on this period, and in the early 1930's it also banned foreign observers from famine areas, so that it has always been difficult to estimate the actual number of people who perished during 1932 and 1933. It is only possible to make some reasonably accurate estimates. Thus, by counting from the 1926 census onward to the mid-1930's (that is, applying growth rates for 1926 cumulatively) and again counting backward from the next census which was held in 1939, a discrepancy of about five-and-one-half million people will be noted. The only apparent explanation for this loss in population can be a large and abrupt increase in the mortality rate during the mid-thirties.* This figure, it may be added, is

much more conservative than many estimates by observers who were in the Soviet Union at the time, or who subsequently visited the famine-stricken areas. While a wholly accurate count is not possible even today, there can be no doubt that about five million people, at the least, lost their lives as a result of famine, mass deportations, and imprisonments, all of which characterized the great collectivization drive of the early 1930's.

But if it is true that hunger and widespread starvation did much to break whatever resistance the peasantry could muster against the Communists, the famine also inflicted a severe setback to Soviet agriculture itself. Fields remained fallow, harvests were left to rot, and livestock were slaughtered. In theory at least, three years had been enough to achieve the collectivization of the bulk of Soviet land holdings, but the output of these holdings had declined catastrophically in the process.

The statistical data detailing these losses in output have remained as much of an official secret as those dealing with the loss of human life. In the 20 years from approximately 1930 to 1950 either information was suppressed completely or the published figures were demonstrably distorted.**

The first technique was essentially simple: few and meaningless figures were released, which bore little if any resemblance to reality. The second technique, involving deliberate misrepresenta-

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* A reduction in birth rates which could bring about such a population decline in so short a time is almost inconceivable.

** Any reader interested in this topic has only to compare the quantity of data published before and after 1930. He will note that the first Five Year Plan was published in two editions consisting of three large volumes. The second Five Year Plan was detailed in one small volume. The third and the first post-World War II Five Year Plans were published in the form of small pamphlets only. At the same time, some of the most informative Soviet journals, including the excellent *Economic Review,* stopped publication. Even the annual *Control Figures* ceased to print extensive or meaningful data on sowing yields, deliveries, agricultural prices, livestock figures, and other basic data.

tion, usually called for the selection of base years which, by their very choice, were bound to show favorable but illusory results.* The third and most famous of these techniques was based on the concept of the "biological yield," which required a new method of harvest reporting so designed as to give a gross overstatement of crop production.**

Under the best of circumstances crop estimates and actual harvests are bound to differ, if only because of genuine errors and unexpected events such as hailstorms, heavy rains, and other natural phenomena. The concept of "biological yield" is, therefore, all the more rash and inaccurate since it tends, quite obviously, to increase rather than reduce the margin of probable error. As used in the Soviet Union it introduced a systematic upward bias because it allowed for a margin of error which was far too low. The dis-

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* A classic example can be found in the calculations which were used to hide livestock losses. This was done by comparing livestock herds in the collective farms at the beginning of the Five Year Plan with the collectivized livestock population of 1937, or some other such year. This statistical deception was based on the omission of the obvious fact that by 1937 almost 100 per cent of all livestock was collectivized, while in 1928 the comparable percentage was well below five per cent. Inevitably, therefore, the spurious results of any such calculation showed a spectacular increase under the Five Year Plans.

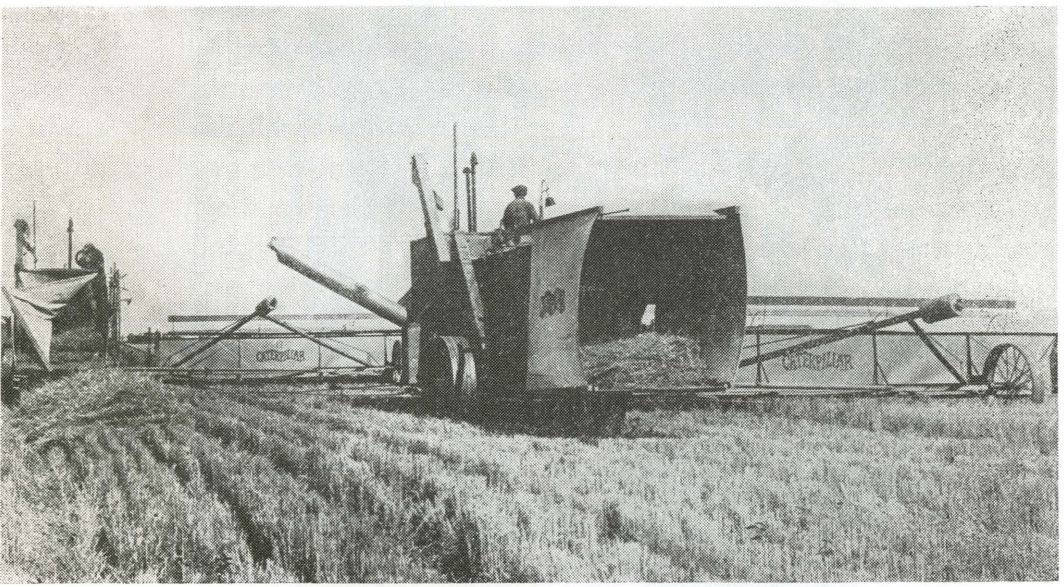
** By using this method the statistician was not asked to report the barn crop—as had been done in the Soviet Union before the 1930's and as it is still done everywhere else. In other words, the reported crop was not the amount which actually found its way into the barns. Instead, an estimate of the potential crop was made in the fields before the actual harvest. Then, this estimate was "corrected" downward to allow for potential losses and reported as the actual harvest. At first the users of this method made some attempt at objectivity by allowing for a ten per cent loss between the field and the barn, and by careful surveys in the field. Later on, even this pretense was dropped, and the technique degenerated into pure farce as shown by this definition from an official publication which appeared as late as 1944: "The harvest on the root, which is determined by sight appraisal about one week before the start of the harvest, is accepted as the actual crop. This appraisal is made for each crop once a year." *Dictionary Handbook on Social Economic Statistics,* Moscow, 1944, p. 88.

organized and apathetic *kolkhozes* lost a much higher percentage of crops between the field and the barn than Soviet statisticians were permitted to account for. The extent of this loss could be calculated with considerable precision if the Soviet government had ever published its data in terms of both barn and biological yields, or had done so for at least one year. This, however, was precisely what the Soviets did not wish to do; at first they published crop data without even calling attention to the fact that a change in reporting methods had taken place. To further confuse the situation, the "loss margins" which the statisticians used in successive years were changed so as to keep some relationship between the crop years, and to continue to report favorable results. This was done because the crop losses in the early 1930's were heavier than in the later years of the decade. To have used the same loss margin in 1937 as in 1933 would have understated the 1937 harvest in relation to that of the earlier period, which, of course, would have been poor propaganda and therefore entirely undesirable from the official point of view. The alternative of putting the harvests of the early 30's in proper relationship to those some years later would have revealed the full extent of the catastrophe which took place during 1932 and 1933. Hence, having once chosen what was at best a questionable system, the Soviet regime had no choice but to keep on "adjusting" that system by reducing already low "loss" allowances in the late 30's and 40's.

The result of these manipulations has been that Soviet harvests were consistently overstated by some 20 per cent for about a fifth of a century.

Once one has understood and made allowance for the overstatement of Soviet crop statistics, the actual economic costs of the collectivization drive can also be assessed with some accuracy. In doing so, one discovers that it was not until 1935 that grain production regained its 1926 level (76.6 million tons) and not until 1937—a record year for the USSR—that the grain harvest exceeded the highest pre-collectivization harvest, reaching 96 million tons. It

Intensified class war and widespread seizures of peasant property marked the launching of the first Five Year Plan. Here, in 1928, Kuzbek authorities, backed by soldiers (right), conduct expropriation proceedings against an allegedly rich "kulak."



More than 5 million people perished and more than 75 per cent of Russian land was collectivized between 1928 and 1933. The machine—this one purchased abroad—became the dominant symbol of the agricultural future in the USSR.

For ideological rather than practical reasons, the Communists have always attempted to introduce factory methods into agricultural production. Here, a Machine Tractor Station driver is checked in by a clerk on a collective farm.

should be noted, however, that this was indeed an exceptional year. Both the 1938 and 1939 harvests were not only below that of 1937, but below 1930 as well.

Yield figures are even more revealing. Thus, in 1925 the average yield of grain per hectare was 8.3 quintals, which rose to about 8.5 quintals in 1930. In 1932 it had fallen to 6.6 quintals (a decline of about one-fourth), and it was not until the exceptional 1937 yields (9.2 quintals per hectare) that the levels of the twenties were surpassed. Yet here again this was the result of one exceptional year: the 1938 and 1939 grain yields averaged slightly below the average for the last four years of the New Economic Policy (1925-1928).

An even more graphic picture of the aftermath of collectivization can be obtained from an examination of livestock data.

Here one notes that in June 1928, the last year of widespread independent farming, there were about 33.5 million horses in the Soviet Union, while immediately following the big collectivization drive of 1932-3 their number had declined to 16.6 million, or less than half. By 1938, ten years after the end of the NEP, the herd had risen to 17.5 million, or somewhat less than two thirds of the 1928 figure. Over the same time span the numbers of other livestock declined similarly. Cattle fell from 70.5 million to 38.4 million head, or by almost half, between 1928 and 1933, and had only climbed to 63.2 million head by 1938. Cows alone declined from 30.7 million head in 1928 to 19.6 million in 1933 and only regained the 25.2-million-head figure in 1938. Sheep and goat herds declined by almost two thirds between 1928 and 1933—that is, from 146.7 million head to 50.2 million—and failed to reach the three-quarter mark of the 1928 total even a decade later, when these herds had risen to barely 102.5 million head. The hog population alone bettered its numbers between 1928 and 1938 by rising from 26 million head to 30.6 million. But even in this case the collectivization process managed to take a heavy toll, since the 1933 herd was well below that of 1928.

The great collectivization drive completely changed the face of the Soviet Union in a remarkably short period of time. From the Communist point of view, this drive was an almost complete success: by 1936, over 90 per cent of all households were collectivized and more than 96 per cent of the arable land in the Soviet Union was incorporated into collective or state farms. In other words, within the short period of seven years the private farmer had virtually ceased to exist and the dream of a socialist agriculture had been carried into practice.

But the price of this offering to ideological orthodoxy was heavy indeed. It included no less than five million human lives. Agricultural production had fallen to levels far below those which had prevailed before collectivization was introduced with such ruthlessness and on such a large scale. Livestock herds were obliterated, and the population—both urban and rural—if it did not actually starve to death, was nevertheless compelled to suffer hunger and privation for no apparent reason other than that a set of dogmas was being put to a practical test.

It is scarcely surprising, in the light of this terrible experience, that Josef Stalin, in an exceptional moment of candor, once confessed to Winston Churchill that the collectivization drive and the ensuing agricultural catastrophe had presented the greatest danger which the Soviet Union had faced during its existence as the first and only independent socialist state. Although Stalin's statement was indubitably correct, it is significant that he failed to add an explanation of why this danger was faced in the peculiarly abrupt and inhuman way in which the Bolsheviks chose to face it, and that he did not explain precisely what rewards to the Soviet people this decade of sacrifice was supposed to have brought.

The Present System

Although Soviet agricultural institutions have experienced a series of minor changes since the end of the great collectivization drive of the thirties, the broad outlines of the system have not essentially changed. What, then, are the characteristic features of the Soviet countryside? What are its distinguishing marks? And how do these differ from farm institutions in other lands?

The Collective Farm

The collective farm, or kolkhoz, is the most typical and widespread of Communist agricultural institutions—a large farm created by a merger of individual plots of land, cultivated jointly by its members. The land belongs neither to the farmers nor to the farm itself, but remains the property of the state, which leases it to the kolkhoz. All major tools, utensils, farm buildings, and livestock are owned not by individuals but by the collective farm, and returns from proceeds are shared by the peasants according to their labor input. The individual peasant members of the kolkhoz retain title only to their houses, their individual tools, and a small piece of land (usually known as a household plot), some poultry, and an occasional piece of livestock.*

In theory, the kolkhoz is a voluntary organization operating on democratic principles, administered by a chairman who is elected

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* In the early stages of the Soviet revolution the ideal form of the collective farm was a "commune." Inspired by Fourier's "phalansteries" and

by the membership from its own ranks. In practice, the system is much more authoritarian. The history of the collectivization drive and of the peasants' resistance provides ample and frequently tragic proof that the kolkhozes are not, in fact, voluntary associations. Similarly, although the formalities of the election process are observed, the chairman is in fact appointed, and is frequently not a member of the kolkhoz at all but imported from some other area. With increasing frequency he has tended not to be a peasant.*

Similarly, though the kolkhoz in theory enjoys wide authority over its own cultivation program, its plans are in fact dictated by the government in the form of quotas of specified crops which the kolkhoz is legally obligated to produce and surrender to the government. As a result, the economic life of the kolkhoz, and of its members, is not shaped independently at all, but is in reality only an expression of the government's policy and specific requirements.

The kolkhoz is the most common and widespread agricultural institution in the Soviet Union, but it has never found great favor with either the government or the Communist Party, both of which have always considered it no more than a step on the road to a truly socialist agricultural enterprise.

The State Farm

Although the state farm, or sovkhoz, has never achieved real success in the Soviet Union, it is an institution which deserves

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Owen's communities, these were characterized by joint ownership of *all* assets, both large and small, and by communal living. These, however, proved so highly unpopular, as well as impractical, that they were abandoned, together with a much looser form of collective farming known as the TOZ, which maintained individual ownership and only stressed communal labor. The institution which is described here, also known as the "artel," has been the only one in existence since the thirties.

* To illustrate this point, it need only be recalled that in 1954, in connection with the virgin lands drive and the corn planting program, fully a third of all collective farm chairmen were summarily replaced by Party officials from urban areas.

considerable attention, if only because it is—in theory at least—the model of what the Soviets think Communist agriculture should be. Institutionally, it can be characterized essentially as a nationalized agricultural factory. The land, utensils, farm buildings, livestock, residential housing—in fact all real or movable property—belongs to the state.* The peasants working on the state farms are paid wages according to the nature of their duties. If the crop or livestock plans are not fulfilled, the farm workers may be penalized; alternatively, if plans are exceeded the employees receive special rewards. The system of remuneration is, in other words, almost identical to that in socialized industry.

The popularity of the sovkhoz among the Soviet leaders is easy to explain. The Communists, who profoundly distrust the peasant and who believe the institution of private property to be inimical to their system, see in the sovkhoz the most convenient vehicle for the creation of a rural proletariat. Similarly in early years they were deeply fascinated by what they thought to be the superior economic efficiency of the large producing unit. The state farm, frequently consisting of the lands of former large estates, seemed to provide the ideal solution: a mechanized, rural factory, amenable to efficient political control.

But, in practice, the sovkhoz proved to be far from ideal. From the beginning, the very size of these sovkhozes involved an extraordinary waste of time and fuel merely to bring men and machinery to the work sites. Soon afterward it became apparent that other costs were also very high, even in comparison with the inefficient kolkhozes. Even though an attempt was made to operate them like factories, the incentive process could never be made to work efficiently on the sovkhozes. For one thing the very nature of agriculture renders the formulation and execution

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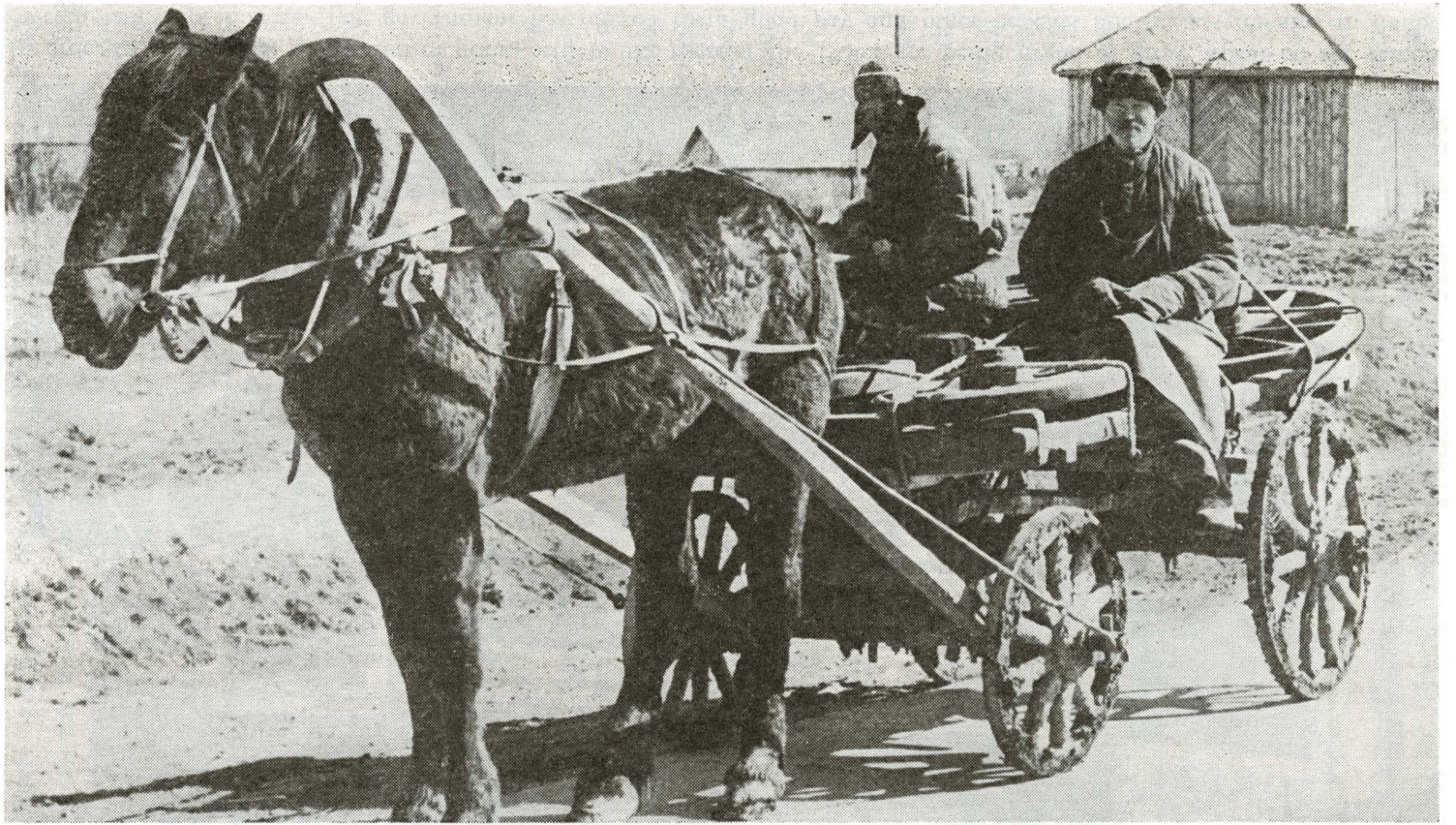
* It should be noted that all land belongs to the state under Soviet law: this is true not only of the land of a collective farm but also of the household plot. The farmer is entitled to the use of the land, but he may not sell or alienate it in any way.

of precise plans difficult, since the controlled conditions which prevail in a factory are impossible. Secondly, the managers of these farms were never much interested in achieving spectacular successes. They knew that an over-fulfilled plan would bring a premium; but this year's extraordinary achievement might easily become next year's norm. Thus, a combination of rigid and often unrealistic planning, managerial apathy, and shortages of equipment, resulted in frequently exorbitant unit costs, for which the government had to pay in the form of subsidies. For these the sovkhoz, unlike the kolkhoz, was eligible since it was a *state* institution.

Given these basic limitations, many of the state farms led a brief and precarious existence. The enormous sovkhozes of the nineteen thirties were soon condemned, and divided into smaller and relatively more efficient kolkhozes. Nevertheless, the essential ideas which lie at the root of the sovkhozes as units of agricultural organization and production have shown remarkable persistence —as evidenced by the attempt, in Stalin's last years, to construct a number of gigantic "agrocities." The plan called for the consolidation of widely scattered kolkhoz and sovkhoz lands, for the abolition of existing living areas and their amalgamation into new and larger "rural towns," for the centralization of communal services, and, implicitly, for the intensification of controls.

This program once again proved to be short-lived. The inevitable dislocations which it would have entailed threatened a degree of chaos in production which the Soviet Union could not afford, and the chronic shortages of building material from which the Soviet Union has always suffered made any plan which called for the construction of residential dwellings and communal buildings for several million people totally impracticable.

Nevertheless, it is doubtful that even this failure has finally led to the abandonment of the ideas which apparently inspired it. On the contrary: the struggle between ideology and experience still seems very much alive, as shown by the fact that the recently



In 1953, when these collective farmers were photographed 30 miles from Moscow, Khrushchev informed the Party of serious failures in the agricultural system: continuing machinery shortages, poor crop yields, and depressed standards of living.

In order to raise Soviet production of grain, settlers like these of the 1930's are being urged to grow wheat on the remote "virgin lands" of Siberia. The government has offered them good pay and other benefits but success remains in doubt.

inaugurated drive to settle the "virgin lands" in the interior of the Soviet Union has once again been assigned by the state and the Party to a number of newly created state farms.

The Machine Tractor Stations

A third and equally basic feature of the Russian countryside is the machine tractor station (MTS). This institution plays a double role in Soviet agricultural economics. Its ostensible purpose is to serve as a central pool of machinery for use by the collective farms of a given district, but this is by no means its only function. It is, in addition, a major crop-collecting agency, and as such operates as one of the chief and most powerful instruments of state control in the countryside.

The first of the MTS were organized in 1930 to furnish the swiftly growing number of collective farms with machinery. This particular course was chosen in part at least because the government lacked the farm machinery to equip the individual kolkhozes, but it is doubtful that this was the chief reason even at the beginning of the collectivization drive. Ownership and control of machinery would have given the collectives too dangerous a measure of independence from the government and Party. Hence, as the supplies of machinery gradually increased they were turned over to more and larger MTS, which in turn acquired the characteristics of permanent institutions.

As the agency controlling the bulk of all farm machinery, the MTS came to perform most of the mechanical work connected with farm production, including such essential processes as plowing, harrowing, harvesting, threshing, and other related activities. For these services, each of the stations is paid not cash, but a portion of the crop which it helps to harvest, the exact fee being determined by an elaborate schedule. While the MTS are state institutions, their personnel are not entirely on the state's payroll. Tractor drivers and other machine operators, for example, are paid directly by the collective farm, while only the managerial staff, always

including a political officer, are directly employed by the government.

Although the contract between a collective farm and its MTS is theoretically based on the equality of both parties, the latter is actually in a much stronger bargaining position. From a political viewpoint, the MTS is one of the chief emissaries of the central government in the countryside; and in the Soviet Union the central government is always likely to inspire a measure of deference and fear. Again, because it is the sole custodian of all-important machinery, it is apparent to both parties that no collective farm can gather its harvest, meet its obligatory delivery quotas, or feed its members without the equipment which the MTS disposes. As a result, and quite apart from the tenets of Soviet theory, the kolkhoz finds itself in an inferior position, and this the MTS usually exploits, either with or without official sanction. Since the MTS almost always service more than one kolkhoz and since the MTS are, in any case, usually behind schedule (by reason of mechanical breakdowns, shortages of spare parts, or faulty work organization) they are clearly in a position to decide which kolkhoz shall be serviced first. Or again, by seeking the necessary adjustment of payment schedules, the MTS in practice are able to dictate what a collective farm can and cannot sow, by claiming to be able to harvest only those crops which are most profitable to themselves and coincidentally most useful to the state.*

Thus it is fair to say that the network of MTS is not only the third but also the pivotal instrument characterizing Soviet agricultural institutions, at least insofar as the MTS system is able to exert a decisive influence on the operations and on the ultimate successes which the other two can achieve.

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* Under the complex accounting devices which characterize all Soviet economic activity, certain types of work are judged to be more profitable than others, even though they may not be more arduous or more useful socially.

State Procurements and Peasant Incomes

The system just described is designed to extract a maximum of produce from the countryside. Its primary purpose is not to further output or to increase peasant incomes, but rather to guarantee a regular flow of grain and other agricultural commodities to state warehouses. This, it should be noted, it done not only through the instrumentality of the MTS, whose share of each year's crops constitutes the state's largest single source of agricultural products;* in addition, the state regularly imposes a set of delivery quotas which each of the collective farms is legally obligated to meet in full, regardless of weather conditions, crop yield, or the quality and quantity of the harvest.

The specific amounts to be delivered to the state depend on the type of crop, the size and location of the farm, and, of course, on the current needs of the state. They are, in other words, fixed amounts determined in advance, and never a percentage of the harvested crop. It necessarily follows that when the needs of the state are high and the harvest poor, these fixed and inescapable obligations impose a severe hardship on the peasants, both individually and collectively.**

In theory, at least, this might have left the peasant with no income whatever, except for his share of the receipts which the state pays to each collective farm for the collection of its crop. In

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* As an example, the figures for 1939-40 show that 19 per cent of the grain crop was handed over as payment to the MTS, while only 14 per cent was delivered directly to the state in the form of compulsory deliveries. This total of 33 per cent of the crop must then be compared with the share which the state in turn distributed to the peasants, which accounted for only 23 per cent of the crop, *Izvestia,* Moscow, March 29, 1941.

** The rigidity of the system is such that if, for any reason, a kolkhoz cannot meet its assigned quotas from the current harvest or its own reserves, it is forced to purchase the amount of its deficit on the free market and at considerable cost.

better years this base income is, of course, supplemented by a division of the residual produce of each kolkhoz to its membership, carried out according to a complex and variable accounting system.

Under this system, the kolkhoz member is paid either in cash or in kind, depending on the amount of labor he had performed on behalf of the collective farm. The accounting unit used to determine that amount is the "labor day," the value of which varies with the nature of the work involved and the length of time spent in the performance of a given task.* The number of labor days accumulated by a peasant determines his share of the collective farm's income, after legal obligations to the state are met.

In the early days of collectivization these two were virtually the only sources of the peasant's income. In practice, however, it soon became clear that so rigid a system was unworkable, since it provided little or no incentive to cultivate the soil. Over time, therefore, several concessions were made to the kolkhoz memberships. First, the individual peasant was allowed a small private plot of his own and granted permission to keep a rigidly limited number of livestock on it.** Secondly, the kolkhozes were conceded the privilege of operating so-called collective farm markets, to which the kolkhoz as a whole and its individual members were permitted to bring the produce which remained after all obligations to the state had been met. Prices in this market were determined by the relationship of supply and demand, and were as a rule considerably higher than those paid by the state for compulsory deliveries.

These added incentives, however, quite naturally tended to produce results of which the state and Party could not possibly approve. The collective farmers began to spend increasing amounts of time on their private plots instead of the collective farm land.

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* For example, one day's work performed by a combine operator or senior tractor driver is worth two "labor days," while that same day's work spent as a cleaning woman is worth only one half a "labor day."

** The size of these plots and the number and kinds of animals varied from region to region, and also changed with the passage of time.

They learned almost immediately that time and effort spent on the household plot were infinitely more remunerative than any they could devote to the cultivation of collective land. The government's response to this intensely human development was to introduce a mandatory minimum number of labor days for each member of a collective farm. Any member who did not spend this prescribed number of labor days on the lands of the kolkhoz became subject to expulsion. Even though membership in a collective farm has always been far from popular in the Soviet Union, such an expulsion nonetheless constitutes a serious threat to any farmer. Inevitably, the expulsion of any one member of a collectivized household results in a loss of family earnings. In more extreme cases, involving heads of households and their families, it means that the individuals concerned have simply forfeited all possibilities of earning their living in the countryside, for the obvious reasons that they have lost their share of the land and the cattle, and that private and independent farming has disappeared from the Soviet countryside.

Another and even less desirable effect of concessions to the profit motive was an attempt by the peasantry to expand—usually in an illicit way—the size of their private plots. This occurred on a particularly ominous scale during World War II when, as a result of confusion and an inevitable relaxation of supervision, millions of acres of collectivized land simply "disappeared," and found their way into household plots.

At the war's end the Soviet government was, of course, able to re-establish its system of controls and to recover the "lost" lands; but it was hardly able to obliterate the peasant's desire to rid himself of the restraints imposed by the collectivization system. Soviet farmers have not, as some East European peasants still do, the alternative of escaping from a system of collectivized agriculture. Even so, they still show their resentment by employing every possible means to evade the exactions of the state and to assert their right to private initiative.

In the period following Stalin's death, the Communist Party of the Soviet Union has felt obliged to show greater consideration to the peasantry than in many years. Once again it has introduced a number of concessions, even though these are only adjustments rather than fundamental changes of the system. The innovations have included price increases on the crops which are delivered to the government, either in the form of compulsory deliveries or voluntary sales;* a reduction in the quotas themselves; and the lowering, or elimination, of the special taxes paid on private plots. Nevertheless, after a span of 40 years the basic features of the system remain substantially unchanged. The collective farm and the MTS are still the twin pillars of Soviet agriculture; the bulk of the harvest still goes to the state rather than to the peasant. Rigid ideological and governmental controls over the peasantry have been retained, so that the farmer still has no power to determine what he will produce, how he will produce it, and to whom he may sell.**

This, in broad outline, is the agricultural system which, after decades of development in the USSR, has been exported to, and imposed on, those nations of Eastern Europe and Asia in which Communism has gained political control during the past 10 years. It now remains to assess the results which that system has achieved.

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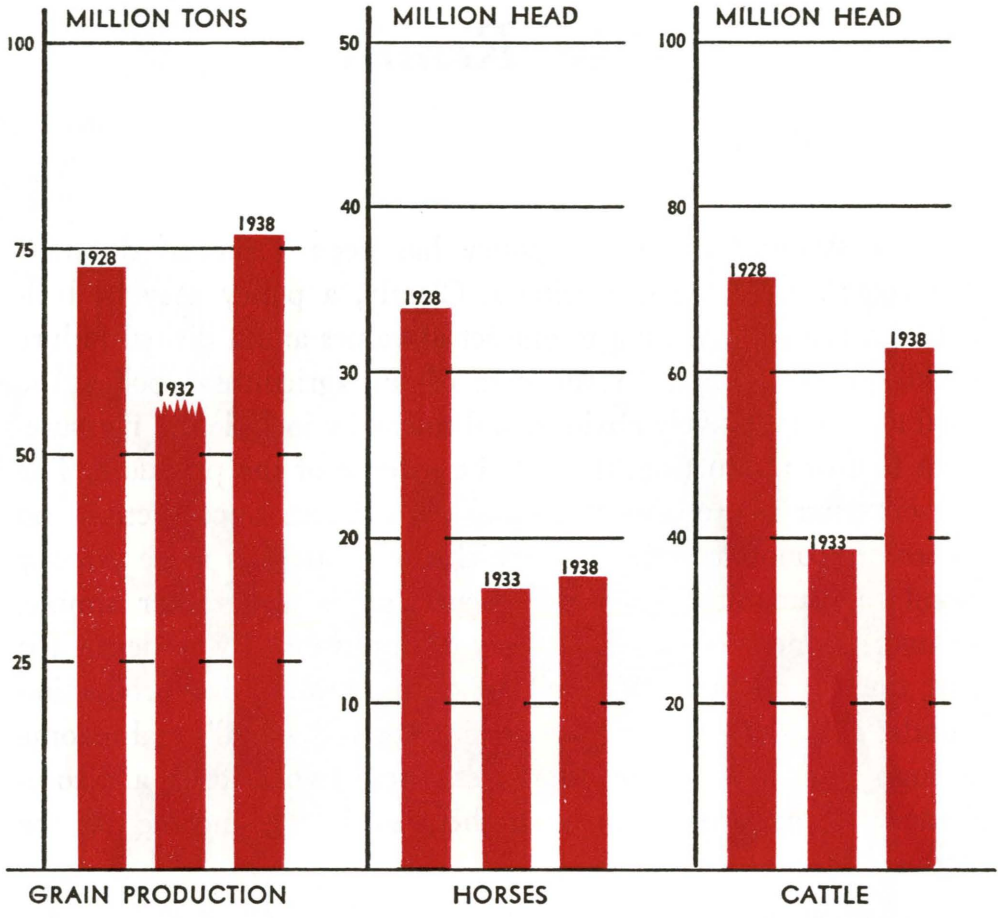
* After fulfilling its compulsory delivery quotas the kolkhoz can sell its remaining produce to the state instead of on the collective farm market. The prices which are paid are well above those paid for compulsory deliveries, even though they are still below free market price levels. There are certain incentives for selling directly to the state, including more favorable credit terms, special discounts on industrial products, and several others.

** An illustration of the inherently authoritarian and involuntary character of Soviet agricultural institutions is provided in the corn growing campaign which was launched at the behest of Party Secretary Nikita Khrushchev in 1954. Once the decision to expand corn production had been made in the inner circles of the government and Party, it appears that some 60 million hectares of corn were immediately planted on Soviet collective farms, in an unparalleled burst of "spontaneity" which required no orders from the higher authorities.

TABLE III

THE COST OF SOVIET COLLECTIVIZATION



Within four years of the inauguration of Stalin's First Five Year Plan, Soviet agriculture suffered a series of dramatic setbacks. The recovery and gains which had been achieved under N.E.P. were wiped out. The production of grain and livestock dropped to the levels which had prevailed during the worst days of the civil war. Ten years after the introduction of the First Five Year Plan, the damage had not been repaired.

Note: Both the 1932 and 1938 grain crop figures are estimates. Grain yields for the former year have never been established with exactitude because of the Soviet Government's continued reluctance to issue reliable statistics. The figure for 1938 has been adjusted to compensate for the upward bias which is imparted by the use of "biological yield" measures in official Soviet tabulations.

Sources: *Sotsialisticheskoe Stroitel'stvo*, Moscow, 1936 and *Sotsialisticheskoe Selskoe Khoziaistvo*, Moscow, 1939

The Results

To determine whether a policy has been a success depends, to a large degree, on our criteria. Clearly, a policy may be brilliantly successful according to one set of values and a dismal failure according to another. In the case of an agricultural policy the usual tests are relatively obvious, and normally include the measurement first of production, then of the income of the producer. The first criterion is probably the more self-evident, since there is no sphere of economic activity in which the product is more directly useful to humanity. The second criterion is also rather simple, because, if most economic activity is motivated by a desire for gain, then in all but totally self-sufficient communities, production is undertaken with a view to increasing the individual's real income through trade. As a rule, moreover, these two criteria are complementary: if production is higher, so is the income of the producer.*

These criteria, because of their universal applicability, can also be used in making an assessment of the results achieved by the agricultural policies of the Soviet Union. Yet lest it be claimed by apologists of the Soviet system that Communist policy objectives

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* Exceptions to this general rule do, of course, exist. Increased production may, by lowering prices, reduce income, a result which in fact was the case in most European countries during the 30's. Nor was the Soviet Union entirely immune from this characteristic of depression: the fall in world prices forced it to increase its exports to maintain income from foreign trade.

Khrushchev has promised that the Soviet Union will surpass American production of meat, milk, and butter by 1960. To help achieve this goal, a delegation of Soviet experts visited the U.S. in 1955, shown here studying American farming techniques.

in agriculture have always been primarily social and political rather than purely economic in character, an attempt will also be made to see just how well the Soviets have fared in pursuit of these essentially non-economic objectives.

Agricultural Production

What, then, is the production record achieved in the USSR over four decades? And, perhaps even more significantly, what is the record in the East European People's Democracies after almost ten full years of concerted effort to pattern their own institutions on the Soviet model, applying the lessons of Soviet experience? Such a combined survey may certainly be expected to have considerable bearing on the question of the efficiency of Soviet agricultural methods.

In 1956, largely as a result of sudden expansion of grain lands in Kazakhstan, the Soviet Union produced some 130 million metric tons of grain, while before the revolution the average annual crop for the years 1909-1913 was in the vicinity of 82 million tons. On the face of it this appears to be an almost spectacular increase. The reason, of course, lies in the fact that 1956 was, in many respects, an exceptional year. The average for the last five years, on the other hand, when compared with the pre-revolutionary figures, presents a more realistic and also much less impressive picture.* Thus, average grain production over the period 1950-1956 was about 101 million metric tons annually, which represents a 30 per cent average increase over the pre-revolutionary period. Even this, however, may be regarded as a fairly impressive gain until account is taken of the population increase which took place in the Soviet Union in the meantime. Czarist Russia, immediately preceding

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* Since agricultural production is always subject to a number of unpredictable elements, averages over a period of years give a more reliable measure than the data for any given year can do.

Despite many promises of a better life which the Soviet rulers have made to the Russian peasant, his life has not improved appreciably over the past four decades. Farmers, like this one photographed in 1954, have paid the price, but have failed to reap the benefits of rapid industrialization in the USSR.

World War I, had a population of some 138 million, while the Soviet Union today—within a land area roughly comparable—has a population slightly in excess of the 200 million mark. This 45 per cent increase in population will be seen to be not only well in excess of the grain output, but in fact half again as high. Moreover, even if it is assumed that the USSR will henceforth be able to maintain an average annual grain production of about 130 million tons, which there are grounds to doubt, this 58 per cent increase in output would still not be much in excess of the population increase. Hence, when seen in this context, it may fairly be said that Soviet grain production has failed to register impressive gains, and that it is in fact doubtful whether the Russian consumer of 1957 is eating more or better bread than he might have in 1913.

The growth of the livestock population has also been less than remarkable. In 1916, the last pre-revolutionary census year, Czarist Russia possessed approximately 60.3 million head of cattle, of which some 26 million were cows. The increase for cattle in general is on the order of 17 per cent, and that of cows somewhat higher. Once again both are well below the Soviet population increase. Admittedly, the quality and yields of the livestock have improved. Whereas the average annual yield of milk per cow was about 1000 kilograms in pre-revolutionary days, it had risen to about 1550 kilograms per cow on collective farms by 1956. Yet even this improvement reflects the generally poor level of Soviet livestock herds. The 1550 kilogram yield on collective farms is only about two thirds that of the 2400 kilogram yields achieved on the state farms in 1956 which, although they are the highest in the Soviet Union, still remain well below the milk yields of other countries.*

It is, of course, beyond doubt that the Soviet Union has made considerable progress over the Czarist Russia of 40 years ago. Yet one cannot lose sight of the fact that the agriculture of pre-

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* As cows on state farms accounted for about six per cent of the total in 1956, the national average milk production in the USSR was roughly 1650 liters. These figures, to become meaningful, must be compared with the yields achieved in other representative countries such as the United States,

revolutionary Russia was retarded and relatively unproductive when compared with the agricultural systems of Western Europe. In fact it is fair to say that only the large landed estates used to produce with any degree of efficiency, while the mass of the peasantry was engaged in sub-standard cultivation, employing both tools and manpower with far less skill and efficiency than elsewhere in Europe. The February and October revolutions of 1917, the spontaneous division of the land, and a series of peasant uprisings provide ample evidence of the low standards of pre-revolutionary agriculture. Given this historical background, it can hardly be unjust to say that agriculture in general, and particularly the attainment of increased production levels, should have been the very first concern of the Soviet government. The fact that even over a period of four decades it has failed to achieve an increase in the production rate commensurate with population growth cannot be explained merely by reference to political or ideological considerations. Whatever these considerations may have been, and whether they are or are not laudable, the actual results testify to the system's lack of flexibility and its apparent inability to provide an adequate food base for precisely that socialist society which the Soviet leaders have been ready to exalt.

The Soviet regime seems to be well aware of the failure of agriculture to match either its own industrial development or the agricultural development of other industrialized nations. The "virgin lands" program which was launched with much fanfare in 1954 is perhaps the best proof of this awareness. During that year some 18.5 million hectares of previously fallow land were sown to grain, and by late 1956 the extent of the newly planted area had risen to over 35 million hectares. Most of this land is in Siberia and Kazakhstan, both of which are poor in moisture, and although the project has yielded a good first harvest it represents a dramatic

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2500 kilograms; United Kingdom, 2900 kilograms; West Germany, 2900 kilograms; and France, 2050 kilograms. In countries which specialize in livestock production yields are higher still—for instance, in Switzerland, 3150 kilograms, and Denmark, 3560 kilograms.

and uncertain gamble. The areas in question are far from normal transportation channels, have few roads, no established communities, and as of this date virtually no farm buildings. An initial investment of considerable magnitude was required merely to open the area to cultivation. Now, enormous expenditures are necessary to settle the new sovkhozes, to equip them with still scarce farm machinery, to build the necessary grain storage facilities, and finally to transport grain to the consuming areas. Under any circumstances, a government would hesitate to embark on such a venture unless it desperately needed grain, and unless it were willing to take considerable risks to get it.

Whether, in fact, the risks which have been taken will justify themselves it is too early to say. Only the dangers stand out in clear relief. The combination of low rainfall and shallow topsoil raises the serious hazard of an enormous dustbowl, which could not only destroy the soil of the virgin lands, but also damage neighboring areas. Even exceptional rainfall in these areas would not eliminate this danger, but merely postpone it! Nor are the apparent successes of the past two years a guarantee of long-range success. Moisture retention in the waste area appears to be extremely low. This becomes a highly significant fact when it is recalled that parts of the so-called virgin lands had actually been put under cultivation in the early thirties only to be left fallow in later years. The yields obtained on these lands have been substantially lower than those achieved on genuinely virgin soils. This would seem to indicate that even over a time span of 20 years the soils of Kazakhstan and Siberia have not succeeded in accumulating or retaining enough moisture to produce an economically justifiable yield. This experience may very well repeat itself in the future. Grain yields may fall off sharply after two or three more harvests because of the declining moisture content of the soil. If this should happen, the entire region will have to be rested for an indeterminate time, whereafter it may or may not continue to produce at lower yields than at the present.

Unlike these future risks, however, the heavy investments and

dislocations in other agricultural areas brought about by the diversion of machinery, personnel, and fertilizers are real and present costs, which will continue to affect the economy even if the productivity of the virgin lands should fall drastically.

The dangers inherent in the "virgin lands" program are, if anything, accentuated by concurrent efforts to introduce corn crops on a massive scale in the other and older agricultural regions of the USSR. This effort involves the transfer of land currently under wheat to corn in view of the latter's greater versatility as against Russia's traditional bread grain crops. It also involves a sharp cutback in wheat production in most parts of European Russia, the introduction of new plowing and cultivation methods, the construction of silage facilities, and the manufacture of large numbers of corn cultivators.

In theory at least, both this and the "virgin lands" grain can fill the gap created by the reduction of the older wheat areas. If climatic conditions over the next several years are virtually ideal, this latest Soviet gamble with its agricultural resources may have a chance of real success. Wheat production on marginal land will have been substantially expanded, while the anticipated increase in corn production will increase available food supplies not only for human but also for livestock consumption. If, however, grain production falls below expectations, if poor weather conditions should prevail, or if future corn yields do not meet planned target levels, then the whole of the most recent effort to revolutionize Soviet agriculture will be in grave jeopardy.

From a purely humanitarian point of view, it is certainly to be hoped that these programs will meet at least with some measure of success, thereby giving the Soviet peasant and consumer in general some small feeling of confidence that he has outdistanced the perennial dangers of hunger and famine. Yet the fact that even this meager gain is still in doubt can only be read as a disastrous reflection on both the management and the achievements of Soviet agriculture. Where, after 40 years, are the fruits of

industrialization and the development of "socialist technology"? Why, after almost half a century, are such emergency programs and heavy risks still necessary? Wherein lies the alleged superiority of a society which has thus far failed to achieve a steady and reliable increase in food production, commensurate with population growth?

In the light of the Soviet record, it is not surprising that the achievement of socialized agriculture in the East European satellites has been far from satisfactory. A brief survey of production in these countries will illustrate the point.

Thus, in Poland, which was a predominantly agrarian country before the Communist seizure, agricultural production, far from having registered significant progress over the past decade, has registered a net decline. According to official Polish sources, the grain crop during the five years 1950-1955, including wheat, barley, and oats, was only some 85 per cent of the 1934-38 average.* Only rye, with a production of 99.8 per cent of pre-war, and sugar beets with 109 per cent of pre-war, have either maintained or surpassed the 1934-38 average. All others have registered declines with barley production, for instance, at barely two thirds of the pre-war average.

These losses have not been due to any reduction of the sown area. Instead, they are the result of a sharp fall in yields. In fact, during the first half of the present decade, grain yields were only about 92 per cent of pre-war and potatoes about 85.5 per cent, while sugar beets, whose output actually increased during this period, only attained 71 per cent of pre-war. This decline both in yields and production has not been and cannot be explained in terms of climate and all the variables which this term implies. Instead, the sources of this failure to maintain, much less develop, Polish agriculture must be sought in the general crisis brought on by essentially the same errors of judgment and policy which have

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* All comparisons involving pre- and post-war Poland are based on adjustments to compensate for border changes.

characterized Soviet experience: forced collectivization, the systematic reduction of incentives, excessive and one-sided industrial investment, and the varied but persistent forms of persecution directed chiefly against the peasantry.

The situation created by these various factors is also reflected in Polish livestock data. The cattle herd in 1955 was only 80 per cent of pre-war, and only small livestock, such as sheep, which increased by almost 120 per cent, have registered any gains. While it is true that World War II destroyed many of Poland's cattle, this by no means provides a full explanation for the failure of the Polish livestock herd to increase over a 12-year period. Nor has the decline been only quantitative; it has been qualitative as well, as shown, for instance, by milk yields, which often serve as a criterion for the quality of cattle. Here again one finds that 1955 yields were about 87 per cent of pre-war—a fall from 3,166 kilograms to 2,743 kilograms per cow.*

But if the Polish case were an isolated one, it might be considered an exception. In fact, it is typical of the experience of the other states of Eastern Europe. Thus Hungary was also a predominantly agricultural country before World War II, and a major grain exporter. More recently it has been forced into the position of a grain importer. In 1955, the year before the October revolt, Hungarian wheat production was 97 per cent of pre-war, rye production 76 per cent, and oat production 62 per cent. Gains were registered only in barley, corn, and some technical crops. Livestock herds declined as they did elsewhere in the area. The cattle herd in 1956 was 94 per cent of pre-war, horses numbered some 82 per cent, while only sheep and hogs registered gains.

In Czechoslovakia (which differs from the other Soviet satellites in that it alone was not a predominantly agricultural country when the Communists achieved power) the pattern tends nevertheless

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* It is significant to note how much higher these yields are than those which have been achieved by the best herds in the USSR at the best of times.

to repeat itself. The production of cereals in 1956, the best year since 1948, was still below the 1934-38 average. Potato production in 1956 was only about 92 per cent of the pre-war average, while the output of sugar beets had remained stationary.* Thus, although agricultural production in general has not suffered a spectacular decline, it has also failed to register any improvement—in spite of the fact that the mechanization of agriculture was well advanced before the 1948 *coup d'etat,* and that the Communists in Czechoslovakia inherited a well developed industrial plant whose subsequent expansion presented different and rather lesser problems than those encountered in the attempt to industrialize predominantly rural economies. This also despite the fact that war-time damages to the Czechoslovak economy in general, and therefore its agriculture as well, was certainly less than that suffered by its neighbors.

Unfortunately, the Bulgarian and Romanian governments have not published data comparable to those furnished by other Communist countries. It may be assumed, however, that had their achievements been more impressive than their neighbors' they would not have hesitated to make them known.

This review of developments in the Soviet Union and the East European satellites (which might easily be extended to Yugoslavia, which occupies an almost unique position in the community of Communist states) cannot fail to lead an impartial observer to the conclusion that "socialist" agriculture as developed in these states has not succeeded in increasing production, and has therefore not contributed to raising the consumption levels of the populations concerned. Certainly in the Soviet Union, it is doubtful that the average of all agricultural production has kept pace with the average rate of population increase. After forty years of trial and error, advance and retreat, the Soviet government must

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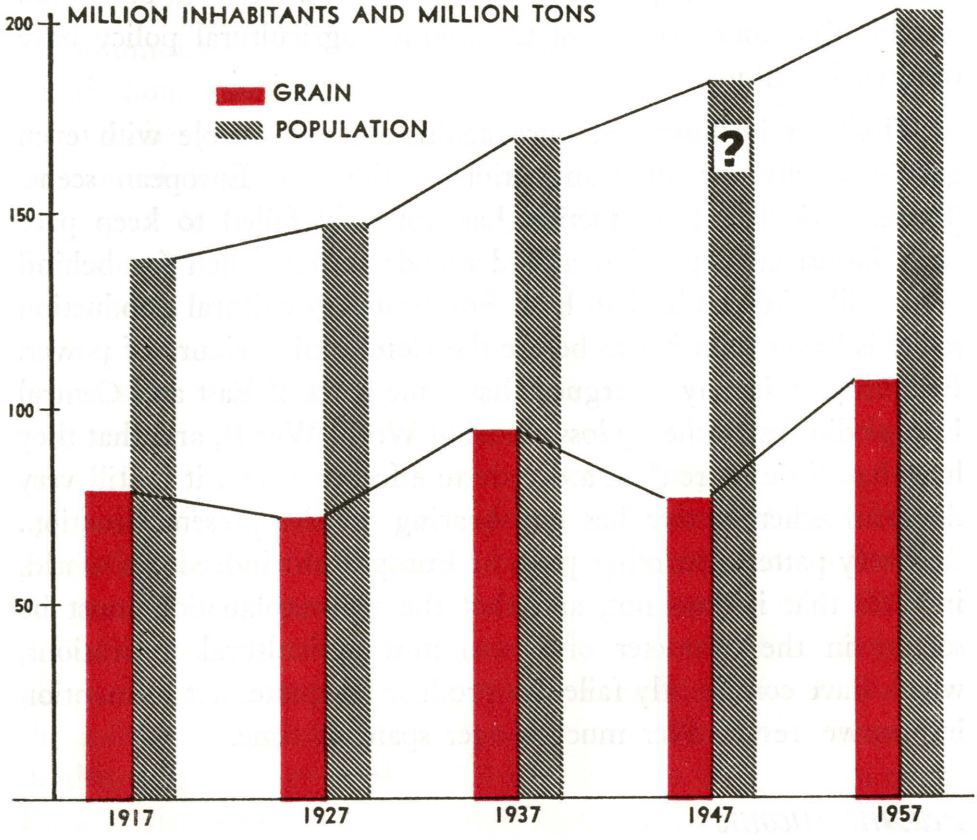
* Czechoslovak livestock production has shown a similar pattern of development. In 1956 the cattle herd had reached 96 per cent of pre-war, while cows numbered some 85 per cent of the pre-war herd, and only pigs and sheep now exceed pre-war totals.

TABLE IV

GRAIN PRODUCTION AND POPULATION GROWTH IN THE U.S.S.R.: 1917 - 1957



The population of the Soviet Union has registered a steady and relatively rapid increase since the Revolution of 1917. The rate of growth was not appreciably slowed by the civil war (1918-1920), the great famine (1932-33) or the second World War. Grain production, on the other hand, has been uneven. It has increased only about 35 per cent as against a 44 per cent population increase during a 40-year period. Moreover, it is interesting to note that grain production in 1917 was greater than in 1947 and that production in 1957 had only registered a 12.4 per cent increase over the admittedly excellent harvest of 1937.

Note: Wherever possible, population and output data refer to the same year. In some cases, however, it was necessary to use different years. Thus, 1917 data refers to the 1913 census year; the 1927 population figure is adjusted from the 1926 census year; the 1937 figure is derived from the 1939 census. The figures for 1957 are estimates.

Sources: *Sotsialisticheskoe Stroitel'stvo*, Moscow, 1936, *Sotsialisticheskoe Selskoe Khoziaistvo*, Moscow, 1939, and *Narodnoe Khoziaistvo SSSR*, Moscow, 1956

still resort to emergency measures, while the economy as a whole remains in a state of serious imbalance. The very effort which is now under way to reshape agricultural production patterns, and thus to create economic institutions which will provide an adequate food base for the Soviet population, is itself the most eloquent admission possible that four decades of Communist agricultural policy have resulted in failure.

This fact is illustrated once again, and if possible with even greater clarity, by an examination of the East European scene. There, agricultural production has not only failed to keep pace with industrial expansion and demand; it has fallen far behind both with the result that East European agricultural production today is lower than it was before the Communist seizure of power. Even though it may be argued that some parts of East and Central Europe did sustain heavy losses during World War II, and that they have had little more than a decade to effect recovery, it is still very doubtful whether this has any bearing on the present situation. Recovery patterns in other parts of Europe, and indeed the world, indicate that it does not, and that the real explanation must be sought in the character of Communist agricultural institutions, which have consistently failed to produce adequate, not to mention impressive, results over much longer spans of time.

Peasant Income

The production record of Soviet and satellite agriculture would leave few grounds on which to suppose that peasant incomes in the Communist orbit have risen while output has fallen or remained stationary. Logically, one would be led to expect the opposite. Yet, it is far from easy to support logical inference with factual data.

The Soviet Union, for instance, has not published standard of living data, retail price indices, or family budgets for over 27 years; and the People's Democracies, with the possible exception of Poland, have hardly published more. Nevertheless, though the

available information is necessarily fragmentary it is possible to form a meaningful picture of peasant income.

As noted above, the kolkhoz farmer generally derives his income from two sources: (1) his share of the net kolkhoz income calculated according to the number of "labor days" which he has accumulated; and (2) receipts from the sales of produce raised on his household plot. The recent publication of pertinent data in a number of Soviet journals makes possible an approximate calculation of the amounts of cash and produce which the peasant can expect from these two sources of income.* The data suggest that annual receipts of about 257,000,000 rubles went to each of approximately 1250 kolkhozes of Moscow province in 1956. It is also known that some 87,000,000 labor days were credited to the kolkhoz members of this province during that year, from which it follows that the value of one "labor day" is rated at approximately 3.70 rubles. If it is then assumed that the average kolkhoz peasant earns approximately 350 "labor days" per year, his annual cash income from the collective farm would be in the vicinity of 1300 rubles per year.** In addition to this, the same peasant receives 1.22 kilograms of grain per labor day, which makes a total of about 425 kilograms annually. In theory, at least, he may sell this amount on the collective farm market, but it is most unlikely that he would do this with all or even most of it since grain is a staple item of the Russian diet whose per capita consumption is in the neighborhood of 250 kilograms per annum. If it is further assumed that not all the members of a kolkhoz household earn the same number of "labor days," and indeed that some of them earn none at all, it can then be safely assumed that most of the grain received is actually consumed by the peasant and his family rather than put up for sale.

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* *Voprosy Ekonomiki,* Moscow, Nov. 6, 1956 and *Pravda,* Moscow, February 2, 1957.

** *Pravda,* February 2, 1957, gives an average of 343 for the Moscow province.

TABLE V

THE SOVIET LIVESTOCK POPULATION
1917 - 1955

(Within the present boundaries of the U.S.S.R.)

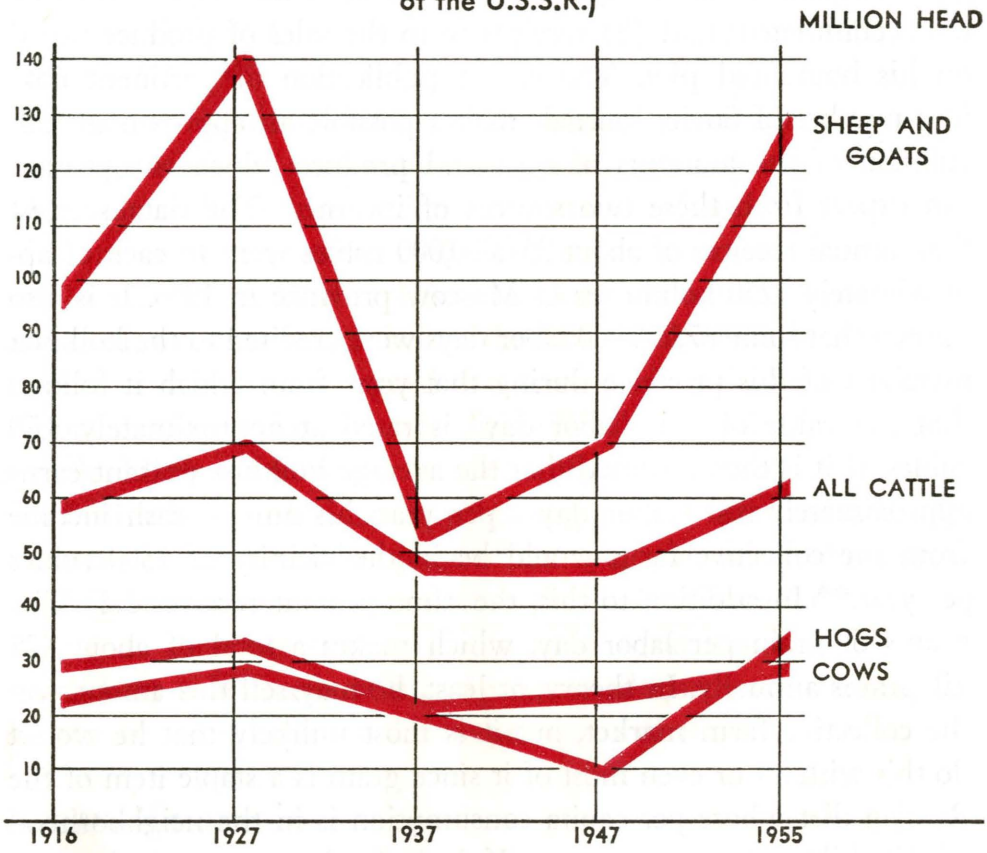


Table IV shows that the total Soviet livestock herd was substantially the same in 1955 (the latest census year) as it had been in 1917. Even more significantly, the figures reveal that it had been much higher in 1927 than it was in 1955. Hogs alone have registered a net gain over both 1917 and 1927, but even this advance is far from commensurate with population growth during the same period of time.

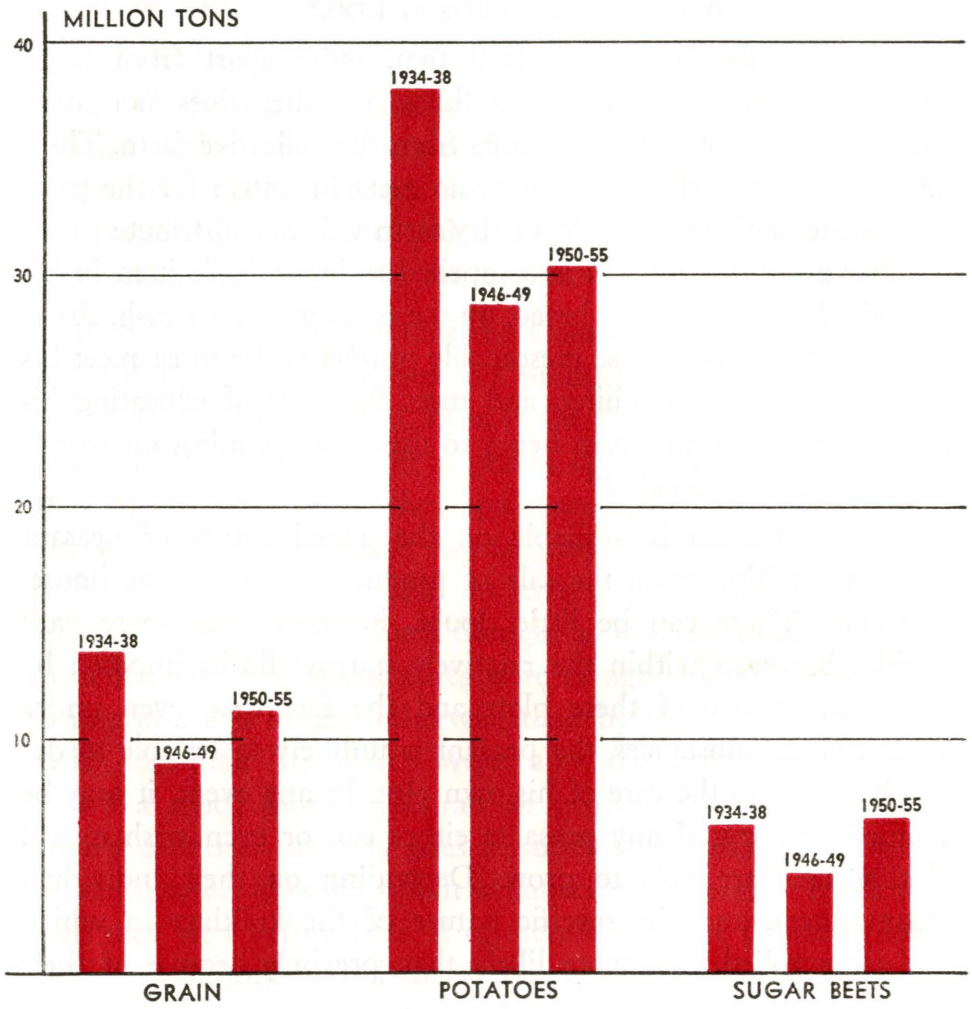
Note 1: 1919 data have been adjusted for the present boundaries of the U.S.S.R.

Note 2: In 1953, the Soviet government shifted the date of its official livestock count from January 1 to October 1. Since figures are available for both dates in the year 1953 it has been possible to adjust the 1955 data accordingly by employing the January-October ratios for 1953. This may, of course, result in a margin of error, but a margin which is so small that it would not significantly alter the results which are reported in this tabulation.

Sources: *Narodnoe Khoziaistvo SSSR*, Moscow, 1956

TABLE VI

THE IMPACT OF SOVIETIZATION IN EASTERN EUROPE: AVERAGE OUTPUT OF SELECTED CROPS IN POLAND PRE- AND POST-WORLD WAR II



Although the Communist government of Poland achieved some gains under its Six Year Plan (1950 - 1955 incl.) over the post-war low of 1946-7, it will be seen that grain and potato production remain well below the level of the 1930's and that the gain in sugar beet production is very modest indeed.

Note: Production figures given in this table have been adjusted in the light of post-war frontier changes.

Source: *Rocznik Statystyczny*, Warsaw, 1956

To place the figure of 1300 rubles in proper perspective a number of factors must be taken into consideration. The first of these is that the cost of everyday necessities is quite high. A kilogram of sugar, for instance, which the kolkhoz farmer cannot grow himself, cost 11 rubles, a kilogram of fresh fish 8 rubles, and a kilogram of tea no less than 68 rubles in 1956.*

It should also be remembered that, quite apart from semi-luxuries like tea, the average kolkhoz member does not automatically receive all basic foodstuffs from the collective farm. Thus, a grain farm is likely to distribute no meat in return for the peasants' "labor day" units, while a dairy farm will not distribute grain. In either event, the peasant is compelled to buy a basic item in his diet, whether it be meat or bread, on the market and for cash. From whatever is left after these inescapable purchases, he must meet his tax obligations, buy clothing, and meet the costs of educating his children before he can even begin to think of spending on manufactured consumer goods.**

No information is available on the actual extent of peasant earnings resulting from the sale of produce grown on the household plot. There can be little doubt, however, that these vary considerably even within the relatively narrow limits imposed by the restricted size of these plots and the fact that, even under the best of circumstances, the peasant is unlikely to be able to devote full time to the care of his own plot. In any event, it may be assumed that few if any peasants either can or even wish to sell all that they are able to grow. Depending on their individual circumstances, and the specific nature of the kolkhoz in which they are enrolled, it is more likely that, precisely because of their

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* Prices from *Komsomolskaia Pravda,* Moscow, February 22, 1957.

** The cash income used in the above calculations and estimates is that for the year 1956. It is, in other words, the income which ensued after the enactment of far-reaching reforms which followed Stalin's death in 1953. Prior to that year, the cash income of *kolkhoz* peasants was about one sixth of the present amount. Current figures are based on *Voprosi Ekonomiki, op. cit.*

low income from other sources, they would prefer to supplement their most basic needs directly from the plot itself. Yet, whatever his choice actually turns out to be, it is scarcely surprising that almost every kolkhoz member spends as much time as he can possibly afford on his private plot. Whether it is money that he needs, or food, or both, he clearly fails to get enough of them for his labor on the collective farm.

It will be recalled that this discussion of the results which socialist agriculture has achieved was undertaken in the light of two widely accepted criteria appropriate to a judgment of success and failure in agricultural policy. In the light of our analysis it is now possible to draw some conclusions.

First, it would appear that the Communist agricultural system has not succeeded in increasing production adequately to meet the needs of rising demand. Even in the Soviet Union such progress as has been registered over a period of 40 years failed to ensure an adequate food base for the population. In the countries of Eastern Europe, which theoretically should have benefited from Soviet experience and hence avoided its errors, production has actually registered a net decline. Even though, as we have said, the agricultures of most of these countries were ravaged by war, it is difficult to interpret this decline otherwise than by reference to the system itself—for their industries were also damaged and still have shown a much more rapid rate of growth. Nor were the Communist countries the only ones to suffer war damage, and yet the agricultures of other European countries are at higher levels today than they were before 1939. It is, therefore, to the political philosophy of Communism and to its economic policies and institutions that one must turn to understand the roots of agricultural failure in the Soviet world.

We must also conclude that, apart from production as such, the Communist system has failed to better the lot of the average peasant. Even if the Soviet peasant of today is somewhat richer than his pre-revolutionary ancestors, it must be remembered that

the Russian peasant was very poorly off indeed before 1917. As to the peasantry of Eastern Europe, little doubt is possible that their present lot is materially worse than it was 20 years ago.

The Political Consequences of Collectivization

It remains to assess the collectivization of agriculture in terms of the political criteria which Communists themselves are most likely to apply—to test the results in terms of ideology and the desire to effect a transformation of society. The characteristic outlook of the Bolsheviks and their latter day descendants renders it entirely conceivable that they be ready to admit that the peasant and agriculture as a whole have suffered over the past four decades, that these losses had been far outweighed by other and more significant successes. To what extent, one may ask, would this assertion be correct.

It is certainly true that, in the Soviet Union and to a lesser extent in the People's Democracies, the entire face of the countryside has been transformed. Private ownership of land has been abolished and the whole nature of peasant life has changed within a remarkably short period. The cost, as we have seen, has been enormous, not only to the peasant himself but to the community at large. Yet more significantly, even in the Soviet Union there is still no "rural proletariat" and there are no "rural factories." The peasant has acquiesced, but has not given his support to the new system. His attachment to the household plot and relative dislike of the collective farm shows him to be still very far from the doctrinaire's concept of a "socialist" man.

The peasant's unwillingness, and inability, to accept both the outward forms and essential implications of socialist agriculture as understood by contemporary Communists is illustrated even more dramatically in the People's Democracies. Only Bulgaria has succeeded in expanding the collective land area to include a majority of the arable land. In all the others, collectivization has

met with the stubbornest possible resistance. In Czechoslovakia, after a peak 38 per cent of the agricultural land had been collectivized in 1953,* there was a decline of 32 per cent in 1956, despite the regime's strenuous efforts to prevent an exodus from the kolkhozes. In Hungary the reversal has been even greater as the share of arable land in collective farms declined from a peak of 28 per cent in June 1953 to 16 per cent in 1955. After the revolt of October 1956 the decline was even sharper with the result that, at the present time, probably less than ten per cent of Hungarian arable land remains collectivized. In Poland, the Communist regime never succeeded in incorporating more than ten per cent of the arable land into the collective sector, a result which was only achieved after laborious effort in 1953. Yet, even this unimposing edifice fell like a house of cards following the events which returned Wladislaw Gomulka to power in October 1956. By early 1957 less than two per cent of the land remained in the collective sector. Finally the Romanian collectivization program, while it shows none of the fluctuations which characterize those of other countries, has simply failed to grow at all. By the end of 1956 no more than nine per cent of the arable land had been collectivized and there are no indications that this situation will change significantly in the foreseeable future.

This is not a picture which is likely to convince the impartial observer that the Communists have succeeded in effecting either a deep or lasting change in the hearts and minds of the peasantry. Except in the Soviet Union, they have not even achieved submission. The peasant of the Communist world has been subjected to every form of pressure and compulsion, and where he has yielded, he has done so of necessity and not of conviction. To speak of any political, psychological, or ideological victory on the Communists' part is, therefore, no more than an illusion. In the countryside, there has simply been no movement or inclination to espouse the Marxist

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* Agricultural land is a broader concept than arable land and includes forests, roads, etc. rather than merely cultivable plowland.

outlook. The kolkhoz and the sovkhoz have been brought into being, but they remain shells without genuine substance. They are organizations without a cohesion of their own which, in the final analysis, can be sustained only by the actual, or implied, use of force.

Nor have the Communists even succeeded in organizing these external forms of agriculture to their own satisfaction. Agriculture as it exists in the Soviet Union today, after 40 years of development, is only a compromise structure which satisfies neither the government nor the peasantry. Its form can hardly satisfy the ideal Marxist pattern since, from a theoretical viewpoint, it is far from perfect. It has none of the health traditionally associated with the hybrid, nor can its frailty be justified on grounds of sheer production.

Conclusion

It can be argued that no industrial development takes place without a measure of sacrifice and that the process has always involved a necessary degree of social dislocation. Similarly, responsible economists will agree that large-scale investment programs, especially when wholly or partially financed from domestic resources, are likely to result in a temporary reduction in consumption and in the rate of investment which can be allowed for agriculture.

Let us agree, then, that industrialization—wherever carried out—requires self-restraint and even abnegation on the part of the mass of citizens. Yet it is a reasonable, as well as vital, question to ask how much self-denial need be endured, and for how long a period of time. It is precisely this question which the Communists have been unwilling to ask or to answer. It has not been a matter with them of simply reducing the level of agricultural investment for a limited period, and thus of suiting the means to the end. Instead, they have actually diminished the capital stock of agriculture. They have not only slowed the rate of growth in that sector of the economy; wherever they have seized power, and retained it, there has been an actual and demonstrable retrogression.

The record of Communist agriculture over the last four decades shows that the Soviets and their satellites have not incurred the penalties of dislocation in the interest of speedy and efficient reconstruction. Instead, their policies seem to have been designed to perpetuate and even to institutionalize the dislocation of a large and vitally important sector of the population.

It would be foolish to question the scientific and industrial gains of the Soviet Union. Some of them have been truly astonishing and

of far-reaching importance. But precisely because there is an advanced Soviet technology the careful analyst must ask to what purpose this technology has been put. Has it advanced general welfare so that its impact has been felt by the broad masses of the people? The Soviet Union has, after all, not been the only country which has made remarkable industrial progress over a relatively short period of time. Other countries have industrialized and succeeded in doing so without destroying entire sectors of their economies. As a model for other nations, therefore, the Soviet system is found wanting—unless it be admitted that sheer military and industrial power, unrelated to national welfare, are desirable ends in themselves.

Finally, and perhaps most important of all, there is the matter of human cost. To what extent can it be said that it has "worked," if it continues to run counter to the inclinations and predilections of a large proportion of the population and if it can only be sustained by force?

The Government and Party of the Soviet Union and of the People's Democracies claim to represent the working class. They claim to speak for the "toiling masses" and to be working for their best interests. Yet it is vital to remember that the peasant too is a member of the "toiling masses"; in fact, the tillers of the soil are still a majority of the population in the Soviet Union, Eastern Europe, and China. To offer privilege and plenty to an elite of scientists, engineers, and state functionaries is easy. The least progressive and most exploitative of the world's societies have done as much for their own elites. The true test of progress—and incidentally of democracy—must be based on different criteria. It must show that just as much has been done for the citizen at large, both in the city and the countryside, for the humble as well as the exalted, for the unskilled as well as the skilled.

Neither the Soviet Union nor the other Communist states can pass this test. All of them have failed in their obligation to the peasant, and by virtue of that failure, to the rest of their peoples as well.

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